APPENDIX IV

40. TERMINAL STATUS INFORMATION

40.1 General. This appendix defines the status information contained in the IU that is available for transfer to the Host upon request.

40.2 Status Data Word Blocks. The Terminal Status Data Word Blocks are specified in 40.5.1 through 40.5.30 and in Table IV-I. This appendix is used for Terminal Status data for the F-15, Army, E-3, Navy Shipboard, Navy Airborne and MCE Terminals. Any unique F-15 or Army Terminal Status data is provided within this appendix and is shown by various "NOTES" throughout. Some unique Navy Shipboard and Navy Airborne Terminal Status data is provided within this appendix. Additional unique Navy Shipboard and Navy Airborne Terminal Status data is provided in Appendix VIII. Unique E-3 Terminal Status data is provided in Appendix X. Unique MCE Terminal Status data is provide in Appendix XI.

40.3 Terminal Status Data Information.

40.3.1 Operational requirements. Selected Status Information will be provided to the Host via Terminal Output Message No. 1. A capability, specific to Navy Shipboard and Navy Airborne, will be retained so that selected memory locations can be interrogated via Terminal Input Message 16 and Terminal Output Message 28 as defined in 80.1.4. That capability will also be available to the ICP for Navy Ship Only and SACP for Navy Air Only.

40.3.2 Interface requirements. The MIL-STD-1553 multiplex bus can be used to convey memory location and status block interrogations. For Navy Shipboard and Navy Airborne, the data transfer is accomplished via Terminal Input Message Number 16 and Terminal Output Message Number 28 as defined in 80.1.4.

Each word is transmitted with Bit "15" being the first bit transmitted. For the numerical parameters illustrated on the following pages the bit values are assigned such that the MSB of any field is the bit transmitted first.

For Navy Air Only, the SACP or for Navy Ship Only, the ICP can be used to request status blocks; the SACP can also be used to request memory locations. See 80.1.6.1.3.3 of Appendix V for panel (SACP/ICP) protocol.

40.4 Status data format. The Status Data Word Blocks will be specified in Table IV-I. The format of the status data words shall be as specified in 40.5.1 through 40.5.30. The format for data specified as "REAL" shall be as specified in Table IV-II. The format for data specified as "BAM" shall be as specified in Table IV-III. The definition of NAV/SYNC filter qualities is given in Table IV-IV and NAV/SYNC transmit qualities in Table IV-V.

40.5 Status Data. The following Status data will be stored in SICP local memory.

TABLE IV-I STATUS DATA WORD BLOCKS

BLOCK NUMBERS	DESCRIPTION	PARAGRAPHS
1	ONGOING STATUS	40.5.1
2	NICP STATUS REPORT NUMBER 1	40.5.2
3	SICP STATUS REPORT	40.5.3
4	D/R NAVIGATION DATA	40.5.4
5	D/R NAVIGATION DATA	40.5.5
6	JTIDS NAVIGATION DATA	40.5.6
7	JTIDS NAVIGATION DATA	40.5.7
8	BIT STATUS REPORT (SEE NOTE 1)	40.5.8
9	GREENWICH MEAN TIME	40.5.9
10-11	NPG MAPPING STATUS	40.5.10
12-13	NOT USED	40.5.11, 40.5.12
14	TACAN STATUS - F-15, NAVY AIR ONLY	40.5.13
15	SACP FILTER REQUEST	40.5.14
16	NICP STATUS REPORT NUMBER 2	40.5.15
17	IJMS 12-SECOND MESSAGE STATUS WORDS AND IJMS PROCESSING STATUS COUNTERS	40.5.16
18-19	SPARE	40.5.17, 40.5.18
20	VMF ROUTE DATA - ARMY ONLY	40.5.19
21-23	CONNECTIVITY DATA - ARMY ONLY	40.5.20
24	POSITION STATUS REQUEST/RESPONSE - ARMY ONLY	40.5.21
25-27	NEEDLINE STATUS - ARMY ONLY	40.5.22
28	COMMUNICANT STATUS - ARMY ONLY	40.5.23
29	NAVY STATUS - NAVY ONLY	40.5.24
30	TSR STATUS REPORT NUMBER 1 - NAVY ONLY	40.5.25
31	UTM/UPS OWN POSITION DATA - ARMY ONLY	40.5.26
32	TSR BASIC BLOCKS SELECTED NUMBER 1 (OWN TERMINAL) - NAVY ONLY	40.5.27
33	TSR BASIC BLOCKS SELECTED NUMBER 2 (OWN TERMINAL) - NAVY ONLY	40.5.28
34	TSR BASIC BLOCKS SELECTED NUMBER 1 (OTHER TERMINALS) - NAVY ONLY	40.5.29
35	TSR BASIC BLOCKS SELECTED NUMBER 2 (OTHER TERMINALS) - NAVY ONLY	40.5.30

NOTES: 1) STATUS BLOCK 8 INDICATIONS ARE RELEVANT ONLY WHEN ONGOING STATUS WORD 1 INDICATES A FAILURE OR DEGRADATION (STATUS BLOCK 1, WORD 3).
2) STATUS BLOCK 32-35 ARE RESERVED FOR SOFTWARE TESTING

TABLE IV-II REAL DATA FORMAT

A REAL (single-precision floating-point) quantity is 32 bits long and has two parts: mantissa, and exponent. The format of the REAL data quantity is shown below.

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 1	MSB MANTISSA															
wd 2	MANTISSA							LSB	EXPONENT							

The bit designation shall be as follows:

WORD 1

BIT	DESIGNATION
0-15	16 MSBs OF 24-BIT MANTISSA. RANGE = -1 TO 1

WORD 2

BIT	DESIGNATION
0-7	EXPONENT. RANGE = -128 TO 127
8-15	8 LSBs OF 24-BIT MANTISSA.

NOTE: THE EXPONENT IS A TWO'S COMPLEMENT REPRESENTATION. THE MANTISSA IS A TWO'S COMPLEMENT QUANTITY AND NORMALIZED SO THAT BIT 14 IS ALWAYS DIFFERENT FROM BIT 15. THE REPRESENTATION OF THE FLOATING POINT ZERO IS THE SINGLE EXCEPTION; IT IS REPRESENTED AS 00000080_{16}.

USING THIS NOTATION, NUMBERS AS LARGE AS 2^{127} (OR APPROXIMATELY 1.7014×10^{38}) AND NUMBERS AS SMALL AS 2^{-129} (OR APPROXIMATELY 1.4694×10^{-39} MAY BE REPRESENTED).

TABLE IV-III BAM DATA FORMAT

Binary Angular Measure (BAM) is a means for representing angles as fixed-point binary numbers in two's complement notation so that the MSB has the value of -180 degrees, or, alternatively, - π radians.

The BAM number generally is 16 (single-precision) or 32 (double-precision) bits long. The formats are shown below.

16-BIT BAM:

	MSB															LSB
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

$$LSB = \frac{180}{2^{15}} \text{ degrees} = \frac{\pi}{2^{15}} \text{ radians in 2's complement}$$

NOTE: If LSB is specified in bit position b, i.e., (16-b)-BIT BAM, then

$$LSB = \frac{180}{2^{(15-b)}} \text{ degrees in 2's complement}$$

32-BIT BAM:

	MSB															LSB
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	MSB															
wd 2																LSB

The bit designations shall be as follows:

WORD 1

BIT	DESIGNATION
0-15	16 MSBs OF 32-BIT BAM NUMBER; REMAINING 16 BITS ARE IN WORD 2.

WORD 2

BIT	DESIGNATION
0-15	16 LSBs OF 32-BIT BAM NUMBER; 16 MSBs ARE IN WORD 1.

$$LSB = \frac{180}{2^{31}} \text{ degrees in 2's complement} = \frac{\pi}{2^{31}} \text{ radians}$$

NOTE: If LSB is specified in bit position b of Word 2, i.e., (32-b)-BIT BAM, then

$$LSB = \frac{180}{2^{(31-b)}} \text{ degrees in 2's complement}$$

TABLE IV-IV NAV/SYNC FILTER QUALITIES

THE TERMINAL DETERMINES GEODETIC POSITION, RELATIVE POSITION, ALTITUDE, TIME AND RELATIVE AZIMUTH QUALITIES AS GIVEN BELOW. VALUES FOR σ_{PG}, σ_{PR}, σ_{H}, σ_{T} ARE APPROXIMATE.			
QUALITY LEVEL Q	GEODETIC POS. (σ_{PG}) (NOTE 1) RELATIVE POS. (σ_{PR}) (NOTE 2) ALTITUDE (σ_{H}) (NOTE 3) (FEET)	TIME (σ_{T}) (NSEC) (NOTE 4)	RELATIVE AZIMUTH (σ_{AR}) (MILLIRADIANS) (NOTE 5)
15	#50	#50	
14	#71	#71	
13	#100	#100	
12	#141	#141	
11	#200	#200	
10	#282	#282	
9	#400	#400	
8	#565	#565	
7	#800	#800	#1
6	#1130	#1130	#2
5	#1600	#1600	#4
4	#2260	#2260	#8
3	#4520	#4520	#16
2	#9040	#9040	#32
1	#18080	#18080	#64
0	>18080	>18080	>64

NOTE 1: Q_{PG} CORRESPONDS TO THE SEMI-MAJOR AXIS OF THE GEODETIC POSITION ERROR ELLIPSE COMPUTED FROM THE COVARIANCE MATRIX.

NOTE 2: Q_{PR} IS 15 FOR THE PRIMARY NAV CONTROLLER; OTHERWISE, IT CORRESPONDS TO THE SEMI-MAJOR AXIS OF THE RELATIVE POSITION ERROR ELLIPSE COMPUTED FROM THE COVARIANCE MATRIX.

NOTE 3: Q_{H} CORRESPONDS TO THE ALTITUDE ERROR, COMPUTED FROM THE COVARIANCE MATRIX.

NOTE 4: Q_{T} IS 15 FOR THE NET TIME REFERENCE NOT USING AN EXTERNAL TIME REFERENCE; OTHERWISE, IT CORRESPONDS TO THE CLOCK BIAS ERROR COMPUTED FROM THE COVARIANCE MATRIX.

NOTE 5: Q_{AR} IS 7 FOR THE PRIMARY NAV CONTROLLER; OTHERWISE, IT CORRESPONDS TO THE GRID DRIFT AZIMUTH ERROR COMPUTED FROM THE COVARIANCE MATRIX.

TABLE IV-V NAV/SYNC TRANSMIT QUALITIES

THESE ARE THE VALUES THE TERMINAL USES WHEN REPORTING ITS GEODETIC POSITION, RELATIVE POSITION, ALTITUDE, TIME AND RELATIVE AZIMUTH QUALITIES TO THE NETWORK. THESE ARE PARTIALLY BASED ON THE FILTER QUALITIES AS FOUND IN TABLE IV-IV. VALUES FOR σ_{PG}, σ_{PR}, σ_{H}, σ_{T} ARE APPROXIMATE.			
QUALITY LEVEL Q	GEODETIC POS. (σ_{PG}) (NOTE 1) RELATIVE POS. (σ_{PR}) (NOTE 2) ALTITUDE (σ_{H}) (NOTE 3) (FEET)	TIME (σ_{T}) (NSEC) (NOTE 4)	RELATIVE AZIMUTH (σ_{AR}) (MILLIRADIANS) (NOTE 5)
15	#50	#50	
14	#71	#71	
13	#100	#100	
12	#141	#141	
11	#200	#200	
10	#282	#282	
9	#400	#400	
8	#565	#565	
7	#800	#800	#1
6	#1130	#1130	#2
5	#1600	#1600	#4
4	#2260	#2260	#8
3	#4520	#4520	#16
2	#9040	#9040	#32
1	#18080	#18080	#64
0	>18080	>18080	>64

NOTE 1: Q_{PG} IS THE FILTER QUALITY FOR A POSITION REFERENCE; OTHERWISE, IT IS MAX (0, FILTER QUALITY-1).

NOTE 2: Q_{PR} IS 15 FOR THE PRIMARY NAV CONTROLLER; THE VALUE, NOT GREATER THAN 14, CORRESPONDING TO THE SEMI-MINOR AXIS OF THE RELATIVE POSITION ERROR ELLIPSE COMPUTED FROM THE COVARIANCE MATRIX FOR THE SECONDARY NAV CONTROLLER; MAX (0, FILTER QUALITY -1) FOR A PRIMARY USER; AND MAX (0, FILTER QUALITY-1), BUT NO GREATER THAN 13, FOR A SECONDARY USER.

NOTE 3: Q_{H} IS THE FILTER QUALITY.

NOTE 4: FOR AN NTR WITHOUT EXTERNAL TIME REFERENCE (ETR), Q_{T} IS 15; FOR ANY TERMINAL WITH ETR, Q_{T} IS THE FILTER QUALITY; FOR ALL OTHERS, IT IS MIN (14, FILTER QUALITY).

NOTE 5: Q_{AR} IS 7 FOR THE PRIMARY OR SECONDARY NAV CONTROLLER; OTHERWISE, IT IS MIN (6, FILTER QUALITY).

TABLE IV-VI Status Data Block Summary

Block No.		Para.	F-15	Army	Navy Ship	Navy Air	E-3	MCE
			App. VI	App. VII	App. VIII	App. IX	App. X	App. XI
1	Ongoing Status	40.5.1	X	X	X+	X+	X+	X+
2	NICP Status Report No. 1	40.5.2	X	X	X+	X+	X+	X+
3	SICP Status Report	40.5.3	X	X	X+	X+	X	X
4	D/R Navigation Data	40.5.4	X	X	X+	X+	X	
5	D/R Navigation Data	40.5.5	X	X	X	X	X	
6	JTIDS Navigation Data	40.5.6	X	X	X	X	X	X
7	JTIDS Navigation Data	40.5.7	X	X	X+	X+	X	X
8	BIT Status Report (see Note 1)	40.5.8	X	X	X+	X+	X+	X+
9	Greenwich Mean Time	40.5.9	X	X	X	X	X	X
10-11	NPG Mapping Status	40.5.10	X	X	X	X	X	X
12-13	Not Used	40.5.11, 40.5.12						
14	TACAN Status	40.5.13	X			X		
15	SACP Filter Request	40.5.14	X	X	X+	X+	X+	X
16	NICP Status Report No. 2	40.5.15	X	X	X+	X+	X	X
17	IJMS 12-Second Message Status Words and IJMS Processing Status Counters	40.5.16	X				X	X
18-19	E-3 Status	40.5.17, 40.5.18					+	
20	VMF Route Data	40.5.19		X				
21-23	Connectivity Data	40.5.20		X				
24	Position Status Request/Response	40.5.21		X				
25-27	Needline Status	40.5.22		X				
28	Communicant Status	40.5.23		X				
29	Navy Status	40.5.24			X	X		+
30	TSR Status Report No. 1	40.5.25			X	X		
31	UTM/UPS Own Position Data	40.5.26		X	+	+		
32	TSR Basic Blocks Selected No. 1 (Own Terminal)	40.5.27			X	X		
33	TSR Basic Blocks Selected No. 2 (Own Terminal)	40.5.28						
34	TSR Basic Blocks Selected No. 1 (Other Terminals)	40.5.29						
35	TSR Basic Blocks Selected No. 2 (Other Terminals)	40.5.30						

KEY:

X	Information in Appendix III applies
X+	Information in Appendix III applies and additional information is provided in the applicable unique IU interface appendix.
+	Information is provided in the applicable unique IU interface appendix.

40.5.1 Ongoing Status (Block 1).

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD															
wd 2	ADDRESS WORD															
wd 3	ONGOING STATUS WORD 1															
wd 4	ONGOING STATUS WORD 2															
wd 5	NET SELECTION STATUS WORD 1 (NAVY AIR ONLY)															
wd 6	NET SELECTION STATUS WORD 2 (NAVY AIR ONLY)															
wd 7	NOT USED															
wd 8	NOT USED															
wd 9	NOT USED															
wd 10	NOT USED															
wd 11	NOT USED															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 1

40.5.1.1 Control Word. (For all blocks)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1			ATS		AE					RT		WC				

The fields in this word are described in 80.1.4.8.1.6.2.1 (Terminal Input Message 16, Word 1). When the IU sends to the Host, in Terminal Output Message 28, a Host-requested Status Block, this control word will be set identically to the Terminal Input Message 16, Word 1, containing the request.

40.5.1.2 Address Word. (For all blocks)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 2	BI						SDW					DWC				

The fields in this word are defined in 80.1.4.8.1.6.2.2 (Terminal Input Message 16, Word 2). When the IU sends to the Host, in Terminal Output Message 28, a Host-requested Status Block, this Address Word will be set identically to the Terminal Input Message 16, Word 2 (for the Data Word Code method), containing the request.

40.5.1.3 Ongoing Status Word 1 (Block 1, Word 3)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	TSTF	TG	TERMF	SA	IPFF	DEGPR		MF	PF	HF	TORDE	TOLD	BATF	NICP	SICP	

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique Ongoing Status Word 1, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique Ongoing Status Word 1, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

The bit designation shall be as follows:

BIT	DESIGNATION
0	NOT USED
1	SICP DEGRADED PERFORMANCE INDICATOR (SICP) LOGIC 1 = TIME OVERLOAD, NO INTERNAL BUFFERS, FLOATING POINT OVERFLOW, DIVIDE BY ZERO, OR NEGATIVE SQUARE ROOT HAS BEEN DETECTED IN THE SICP.
2	NICP DEGRADED PERFORMANCE INDICATOR (NICP) LOGIC 1 = TIME OVERLOAD, NO INTERNAL BUFFERS, FLOATING POINT OVERFLOW, DIVIDE BY ZERO, OR NEGATIVE SQUARE ROOT HAS BEEN DETECTED IN THE NICP.
3	BATTERY FAIL (BATF) LOGIC 1 = BATTERY UNIT HAS FAILED.
4	THERMAL OVERLOAD (TOLD) LOGIC 1 = THERMAL OVERLOAD CONDITION EXISTS IN THE TERMINAL.
5	THERMAL OVERRIDE (TORDE) LOGIC 1 = TERMINAL IS OPERATING IN THE THERMAL OVERRIDE CONDITION.
6	HOST FAIL (HF) LOGIC 1 = INDICATES FAILURE OF HOST INTERFACE IN EITHER DIRECTION. NO COMMUNICATION WITH HOST IN LAST 12 SECONDS. STATUS BLOCK 1

BIT	DESIGNATION
7	PATH FAIL (PF) LOGIC 1 = INDICATES MESSAGE PATH FAILURE OR EXCESSIVE TIME DETECTED FOR SOME NEEDLINE NPG. (ARMY ONLY)
8	MESSAGE FAIL (MF) LOGIC 1 = ONE OF THE FOLLOWING HAS OCCURRED IN THE LAST TWELVE SECONDS: NO MESSAGES RECEIVED; MOST MESSAGES RECEIVED IN ERROR, DEGRADED RTT TRANSMIT PERFORMANCE.
9	NOT USED
10	DEGRADED PERFORMANCE (DEGPR) LOGIC 1 = ONE OF THE FOLLOWING HAS OCCURRED: ANTENNA REDUCED POWER OUTPUT OR VSWR FAIL, A RECEIVER FAIL OR SYNTHESIZER FAIL.
11	IPF FAIL (IPFF) LOGIC 1 = AN INTERFERENCE PROTECTION FEATURE FAILURE HAS BEEN DETECTED.
12	SDU ALERT (SA) LOGIC 1 = AN SDU ALARM OR BAD VARIABLE HAS BEEN DETECTED.
13	TERMINAL FAIL (TERMF) LOGIC 1 = A DDP, R/T, IU, BATTERY, LOOPBACK OR IPF FAIL HAS BEEN DETECTED. (SEE APPENDIX X FOR E-3 AND XI FOR MCE)
14	TEST GO (TG) LOGIC 1 = MANUAL BIT IS COMPLETE AND ALL TESTS HAVE PASSED.
15	TEST FAIL (TSTF) LOGIC 1 = AN LRU FAILURE, TERMINAL FAIL, SDU ALERT, IPF FAIL, OR DEGRADED PERFORMANCE HAS BEEN DETECTED.APPLIES ONLY TO MANUAL BIT AND COMES AT THE END OF LRU BIT.

STATUS BLOCK 1

40.5.1.4 Ongoing Status Word 2 (Block 1, Word 4)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 4	BIP	BL	DC	IDR	IC	NP	NCS	NFS	NS	BF						

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique Ongoing Status Word 2, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique Ongoing Status Word 2, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

BIT	DESIGNATION
0-5	NOT USED
6	BUFFERS FULL (BF) LOGIC 1 = TRANSMIT OR RECEIVE BUFFER HAS OVERFLOWED CAUSING AT LEAST ONE MESSAGE TO BE DROPPED.
7	NO COARSE SYNC (NS) LOGIC 1 = INITIALIZATION IS COMPLETE AND NET ENTRY HAS BEEN INITIATED, BUT COARSE SYNC HAS NOT BEEN ACHIEVED, I.E., THE FIRST NET ENTRY MESSAGE HAS NOT YET BEEN RECEIVED.
8	NO FINE SYNC (NFS) LOGIC 1 = COARSE SYNC HAS BEEN ACHIEVED, BUT FINE SYNC HAS NOT BEEN ACHIEVED. TERMINAL MAY TRANSMIT ONLY RTT MESSAGES.
9	NO NET CONTROL STATION (NCS) LOGIC 1 = TERMINAL IS IN FINE SYNC BUT IT IS NOT IN CONTROL OF A NON-FAILED NET CONTROL STATION (ARMY ONLY).
10	NO PATH (NP) LOGIC 1 = TERMINAL IS IN FINE SYNC BUT DOES NOT HAVE PATH (NPG AND TIME SLOT BLOCK) TO AT LEAST ONE DESTINATION (ARMY ONLY).

BIT	DESIGNATION
11	INITIALIZATION COMPLETE (IC) LOGIC 1 = INITIALIZATION COMPLETE. THIS IS INDICATED AFTER THE LOAD COMPLETE COMMAND INITIALIZATION DATA BLOCK 0, WORD 3 IS RECEIVED, AND THE INITIALIZATION DATA HAS BEEN LOADED AND ACCEPTED.
12	INITIALIZATION DATA REQUIRED (IDR) LOGIC 1 = INITIALIZATION DATA REQUIRED
13	DATA CONFLICT (DC) LOGIC 1 = INITIALIZATION DATA IS IN CONFLICT WITH DATA PREVIOUSLY RECEIVED, OR A VALIDITY ERROR IN THE INITIALIZATION LOAD HAS BEEN FOUND.
14	BAD LOAD (BL) LOGIC 1 = INITIALIZATION DATA LOAD RECEIVED IN ERROR.
15	BIT IN PROCESS (BIP) LOGIC 1 = MANUAL BIT IN PROGRESS

40.5.1.5 Net Selection Status Word 1. (Block 1, Word 5).

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 5		RNPG									NSC				NSS	

The bit designation shall be as follows:

BIT	DESIGNATION
0-1	NET SELECTION STATUS (NSS) - NAVY AIR ONLY BIT 1 • 0 •••••• 0 • 0 NO STATEMENT 0 • 1 REQUEST IN PROGRESS 1 • 0 REQUEST EXECUTED 1 • 1 REQUEST REJECTED
2-5	NET SELECTION COUNTER (NSC) - NAVY AIR ONLY THE COUNTER (INCREMENTED BY 1 EACH TIME A NEW NET SELECTION REQUEST IS RECEIVED) USED TO IDENTIFY THE NET SELECTION REQUEST THAT IS DESCRIBED IN THIS WORD AND THE NEXT WORD. RANGE: 0 - 15
6-14	NPG FOR WHICH THE NET CHANGE WAS REQUESTED (RNPG) – NAVY AIR ONLY RANGE: 0 - 511 IF RNPG = 0, A CHANGE OF THE DEFAULT NET WAS REQUESTED.
15	SPARE

NOTE: NET SELECTION IS REQUESTED EITHER BY INITIALIZATION BLOCK 57 (SEE 80.1.2.15) OR TIM 16, WORDS 16 AND 17 (SEE 80.1.4.8.1.6.2.11).

NAVY ONLY - STATUS BLOCK 1

40.5.1.6 Net Selection Status Word 2. (Block 1, Word 6).

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 6										RNET						

The bit designation shall be as follows:

BIT	DESIGNATION
0-6	REQUESTED NET NUMBER (RNET) - NAVY AIR ONLY RANGE: 0 - 127
7-15	SPARE

40.5.1.7 Checksum Error Words 1-4 (Block 1, Words 7-10).

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 7	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 8	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
wd 9	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
wd 10	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48

LOGIC 1 = A CHECKSUM ERROR WAS FOUND IN THE CORRESPONDING INITIALIZATION BLOCK.
LOGIC 0 = A CHECKSUM ERROR WAS NOT FOUND IN THE CORRESPONDING INITIALIZATION BLOCK.

NOTE: THESE WORDS ARE VALID WHEN INITIALIZATION STATUS (IN TERMINAL OUTPUT MESSAGE 1, WORD 4; SEE 80.1.4.8.2.1.2.4) IS SET TO "LOAD COMPLETE - LOAD ERROR DETECTED", OR, EQUIVALENTLY, BIT 14 OF ONGOING STATUS WORD 2 (SEE 80.1.3.1.2) IS SET TO LOGIC 1.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.1.8 Validity Error Words 1-4 (Block 1, Words 11-14). These words have the same format and are valid at the same time as words 7-10.

LOGIC 1 = A VALIDITY ERROR WAS FOUND IN THE CORRESPONDING INITIALIZATION BLOCK.
LOGIC 0 = A VALIDITY ERROR WAS NOT FOUND IN THE CORRESPONDING INITIALIZATION BLOCK.

NOTE: INITIALIZATION BLOCKS 16-19, 21-22, 56 AND 59 HAVE NO VALIDITY CHECKS AND SO WILL NEVER GENERATE A VALIDITY ERROR.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.1.9 Block Count Error and TSR POOL VALIDITY Word (Block 1, Word 15).

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 15		BCE							V_7	V_6	V_5	V_4	V_3	V_2	V_1	V_0

BIT DESIGNATION

0-7 TSR POOL VALIDITY BITS. SEE TOM 1, WORD 8 (80.1.4.8.2.1.2.8) FOR A DESCRIPTION OF THESE BITS.

8-13 SPARE

14 BLOCK COUNT ERROR (BCE)
LOGIC 1 = A BLOCK COUNT ERROR WAS FOUND IN THE INITIALIZATION LOAD.
LOGIC 0 = A BLOCK COUNT ERROR WAS NOT FOUND IN THE INITIALIZATION LOAD.

NOTE: THIS BIT IS VALID AT THE SAME TIME AS WORDS 7-14.

15 SPARE

40.5.2 NICP Status Report Number 1 (Block 2)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	12 SECOND MESSAGE STATUS WORD 1															
wd 4	12 SECOND MESSAGE STATUS WORD 2															
wd 5	12 SECOND MESSAGE STATUS WORD 3															
wd 6	12 SECOND MESSAGE STATUS WORD 4															
wd 7	12 SECOND MESSAGE STATUS WORD 5															
wd 8	12 SECOND MESSAGE STATUS WORD 6															
wd 9	12 SECOND MESSAGE STATUS WORD 7															
wd 10	12 SECOND MESSAGE STATUS WORD 8															
wd 11	12 SECOND MESSAGE STATUS WORD 9															
wd 12	12 SECOND MESSAGE STATUS WORD 10															
wd 13	12 SECOND MESSAGE STATUS WORD 11															
wd 14	MODE WORD															
wd 15	BIT WORD 1															
wd 16	BIT WORD 2															
wd 17	CRYPTO AND RELAY STATUS															
wd 18	TRANSMITTED QUALITY AND OTAR STATUS															
wd 19	SYNC STATUS															
wd 20	SUMMED CLOCK BIAS WORD 1															
wd 21	SUMMED CLOCK BIAS WORD 2															
wd 22	HARDWARE FREQUENCY CORRECTION															
wd 23	JTIDS TOD WORD 1/TRANSMISSION SHUTDOWN INDICATOR WORD															
wd 24	JTIDS TIME OF DAY WORD 2															
wd 25	JTIDS TIME OF DAY WORD 3															
wd 26	NO. OF ILLEGAL INSTRUCTION INTERRUPTS															
wd 27	NO. OF ILLEGAL CPU CLOCK STATE INTERRUPTS															
wd 28	LOOPBACK MESSAGE TYPE FAILURES															
wd 29	OTF CONSTANT FREQ. OFFSET STATE WORD 1															
wd 30	OTF CONSTANT FREQ. OFFSET STATE WORD 2															
wd 31	REL NAV KALMAN FILTER STATUS 1															
wd 32	KALMAN FILTER QUALITIES															

STATUS BLOCK 2

40.5.2.1 12 Second Message Status Words. (Block 2, Words 3 through 13)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 3	NO. OF SUCCESSFUL TRANSMISSIONS RECEIVED DURING LAST REPORTING INTERVAL (DOES NOT INCLUDE RTT'S)															
wd 4	NO. OF RTT INTERROGATIONS TRANSMITTED															
wd 5	NO. OF RTT REPLIES RECEIVED															
wd 6	NO. OF TRANSMISSIONS RECEIVED IN ERROR															
wd 7	NO. OF MESSAGES NOT ACKNOWLEDGED															
wd 8	NO. OF LOOPBACK DECODE FAILS															
wd 9	NO. OF LOOPBACK TOA FAILS															
wd 10	NO. OF LOOPBACK FAILS (NO LOOPBACK)															
wd 11	NO. OF SUCCESSFUL LOOPBACKS															
wd 12	NO. OF TEST MESSAGE BIT-BY-BIT COMPARE FAILS															
wd 13	NO. OF SUCCESSFULLY RECEIVED TEST MESSAGES															

40.5.2.2 Mode Word. (Block 2, Word 14)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 14		IPF FAILURE					IPF OVER		A/J MODE			TEST MODE		XMIT MODE		
		UTF	REF	PWF	FSF	PLF										

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

The bit designation shall be as follows:

BIT	DESIGNATION
0-2	TRANSMISSION MODE (XMIT MODE)

BIT 2 • 1 • 0	
0 • 0 • 0	TDMA OFF
0 • 0 • 1	NORMAL
0 • 1 • 0	POLLING
0 • 1 • 1	NOT USED
1 • 0 • 0	RADIO SILENT
1 • 0 • 1	NOT USED
1 • 1 • 0	NOT USED
1 • 1 • 1	LONG TERM TRANSMIT INHIBIT

FOR MCE:
For the MCE unique value of this field, see Appendix XI.

BIT	DESIGNATION
3-4	TEST MODE

BIT 4 • 3

0 • 0	TEST MODE OFF
0 • 1	TEST MODE 1
1 • 0	TEST MODE 2
1 • 1	NOT USED

5-7 A/J MODE (A/J MODE)

BIT 7 • 6 • 5

0 • 0 • 0	NOT USED
0 • 0 • 1	A/J MODE 1
0 • 1 • 0	A/J MODE 2
0 • 1 • 1	NOT USED
1 • 0 • 0	A/J MODE 4
1 • 0 • 1	NOT USED
1 • 1 • 0	NOT USED
1 • 1 • 1	NOT USED

8-9 IPF OVERRIDE (IPF OVER)

BIT 9 • 8

0 • 0	OFF, 100/20
0 • 1	EXERCISE
1 • 0	COMBAT
1 • 1	OFF, 100/50

10-14 IPF FAILURES (5 BITS)

BIT 10=1 POWER LIMIT FAILURE (PLF)
BIT 11=1 FREQUENCY SPECTRUM FAILURE (FSF)
BIT 12=1 PULSE WIDTH FAILURE (PWF)
BIT 13=1 RADIATED ENERGY FAILURE (REF)
BIT 14=1 UTILIZATION FAILURE (UTF)

15 Not Used

40.5.2.3 BIT Word 1 (Block 2, Word 15)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 15		RTC	TFC	GMAF	GMF	PIR		CHF	SQN	DVZ	OVS	NOB	TO	ROM	RAM	CPU

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = CPU FAILURE (CPUF)
1	LOGIC 1 = RAM FAILURE (RAMF)
2	LOGIC 1 = ROM FAILURE (ROMF)
3	LOGIC 1 = TIME OVERLOAD (TO)
4	LOGIC 1 = NO BUFFERS AVAILABLE (NOB)
5	LOGIC 1 = FLOATING POINT OVERFLOW (OV)
6	LOGIC 1 = FLOATING POINT DIVIDE BY ZERO (DVZ)
7	LOGIC 1 = SQUARE ROOT NEGATIVE ARGUMENT (SQN)
8	LOGIC 1 = CHRONOMETER FAIL (CHF)
9	NOT USED
10	LOGIC 1 = POSITION INITIALIZATION REQUIRED (PIR)
11	LOGIC 1 = GLOBAL MEMORY FAILURE (GMF)
12	LOGIC 1 = GLOBAL MEMORY ADDRESS FAILURE (GMAF)
13	LOGIC 1 = ASSIGNMENT PENDING TABLE FULL (TFC)
14	LOGIC 1 = R/T RCVR CIRCUMVENTION IN PROCESS (RTC)
15	NOT USED

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

STATUS BLOCK 2

40.5.2.4 BIT Word 2 (Block 2, Word 16)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 16						CTPF	IDSW	TSF	DTBF	DTBNA	UDTB	SICPF	RTF	TMWF	FR T	PTPF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = PLAIN TEXT PROCESSOR FAIL (PTPF)
1	LOGIC 1 = FREEZE TIME (FRT)
2	LOGIC 1 = TUNE MODE WRAPAROUND FAIL (TMWF)
3	LOGIC 1 = R/T FAIL (RTF)
4	LOGIC 1 = SICP FAIL (SICPF)
5	LOGIC 1 = UNIDENTIFIABLE DTB (UDTB)
6	LOGIC 1 = DTB NOT ACKNOWLEDGED (DTBNA)
7	LOGIC 1 = DTB FULL (DTBF)
8	LOGIC 1 = TASK SCHEDULE FAIL (TSF)
9	LOGIC 1 = INVALID DTB START WORD (IDSW)
10	LOGIC 1 = CYPHER TEXT PROCESSOR FULL (CTPF)
11-15	NOT USED

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.2.5 Crypto and Relay Status Word (Block 2, Word 17)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 17	RFAB	RFAA			CRYPTO STATUS									CONR	VNR	MNR

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = ACTIVE MAIN NET RELAY (MNR)
1	LOGIC 1 = ACTIVE VOICE NET RELAY (VNR)
2	LOGIC 1 = ACTIVE CONTROL NET RELAY (CONR)
3-11	CRYPTO STATUS

BIT 3=1 SDU VARIABLE 0 BAD
BIT 4=1 SDU VARIABLE 1 BAD
BIT 5=1 SDU VARIABLE 2 BAD
BIT 6=1 SDU VARIABLE 3 BAD
BIT 7=1 SDU VARIABLE 4 BAD
BIT 8=1 SDU VARIABLE 5 BAD
BIT 9=1 SDU VARIABLE 6 BAD
BIT 10=1 SDU VARIABLE 7 BAD
BIT 11=1 SDU ALARM

NOTE: SEE 80.1.3.6.12 FOR A DESCRIPTION OF THESE CRYPTO STATUS BITS

12-13	NOT USED
14	LOGIC 1 = FWD RFA (A) TEST FAIL
15	LOGIC 1 = AFT RFA (B) TEST FAIL

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.2.6 Transmitted Quality and OTAR Status Word (Block 2, Word 18)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 18	OTS	Q_{AR}			Q_{PR}				Q_{PG}				Q_T			

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	TIME QUALITY (Q_T) SEE TABLE IV-V
4-7	GEODETIC POSITION QUALITY (Q_{PG}) SEE TABLE IV-V
8-11	RELATIVE POSITION QUALITY (Q_{PR}) SEE TABLE IV-V
12-14	RELATIVE AZIMUTH QUALITY (Q_{AR}) SEE TABLE IV-V
15	LOGIC 1 = OTAR SUCCESSFUL (OTS)

40.5.2.7 Sync Status Word (Block 2, Word 19)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 19	NTR	ETR	RTT SUM-MARY		ETR SUM-MARY		NSOVF		SFR	SYNC MODE			SYNC STATUS			

The bit designation shall be as follows:

BIT	DESIGNATION

0-3 SYNC STATUS

BIT 3 • 2 • 1 • 0	
0 • 0 • 0 • 0	NO SYNCHRONIZATION (NS)
0 • 0 • 0 • 1	COARSE SYNC ACHIEVED (CSA)
0 • 0 • 1 • 0	COARSE SYNC CONFIRMED (CSC)
0 • 1 • 0 • 0	FINE SYNC IN PROGRESS (FSP)
1 • 0 • 0 • 0	FINE SYNC ACHIEVED (FSA)
	OTHER VALUES NOT USED

4-6 SYNC MODE

BIT 6 • 5 • 4	
0 • 0 • 0	NO FILTER (I.E., NTR WITHOUT ETR)
0 • 0 • 1	ACTIVE SYNC
0 • 1 • 0	SECONDARY USER
1 • 0 • 0	RADIO SILENT (PASSIVE SYNC)
	OTHER VALUES NOT USED

FOR MCE:
For the MCE unique values of this field, see Appendix XI.

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

7 LOGIC 1 = SYNC FILTER RESET (SFR)

8-9 NO. OF SYNC OBSERVATION VALIDITY FAILURES (NSOVF)

BIT	DESIGNATION
10-11	ETR SUMMARY

BIT 11 • 10	
0 • 0	NO STATEMENT
0 • 1	SUCCESSFUL ETR
1 • 0	ETR FAILURE
1 • 1	NOT USED

BIT	DESIGNATION
12-13	RTT SUMMARY

BIT 13 • 12	
0 • 0	NO STATEMENT
0 • 1	SUCCESSFUL RTT
1 • 0	RTT-A FAIL
1 • 1	RTT-B FAIL

BIT	DESIGNATION
14	EXTERNAL TIME REFERENCE (ETR) LOGIC 0 = ETR IS NOT ENABLED LOGIC 1 = ETR IS ENABLED
15	NET TIME REFERENCE (NTR) LOGIC 0 = TERMINAL IS NOT NTR LOGIC 1 = TERMINAL IS NTR

40.5.2.8 Summed Clock Bias Words (Block 2, Word 20 and 21)

TYPE: REAL
UNITS: Nanoseconds
DEFINITION: Total amount of clock bias corrections sent to the clock during the reporting period.

40.5.2.9 Hardware Frequency Correction Word (Block 2, Word 22)

BIT	DESIGNATION
0-15	16-BIT TWO'S COMPLEMENT

TYPE: FIXED POINT
LSB: 20×2^{-9} Hz
RANGE: APPROXIMATELY ∀ 20 Hz
DEFINITION: Copy of Hardware frequency correction word (SEE 10.1.1.4.2) sent to the Reference Time Base (RTB) during reporting time.

40.5.2.10 JTIDS Time of Day Word 1/Transmission Shutdown Indicator Word (Block 2, Word 23)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 23	TAC	NCS	HIPFF	XDFE	NFS										SET	

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

The bit designation shall be as follows:

BIT	DESIGNATION
0-1	SET BIT 1 • 0 •••••••

0 • 0	SPARE
0 • 1	A
1 • 0	B
1 • 1	C

2-10	NOT USED
11-15	TRANSMISSION SHUTDOWN INDICATORS

BIT 11 = 1 FINE SYNC NOT ACHIEVED (NFS)
BIT 12 = 1 TRANSMIT DUTY FACTOR EXCEEDED (XDFE)
BIT 13 = 1 HARDWARE IPF FAILURE (HIPFF)
BIT 14 = 1 COARSE SYNC NOT ACHIEVED (NCS)
BIT 15 = 1 TACAN ONLY (TAC)

40.5.2.11 JTIDS Time of Day Word 2 (Block 2, Word 24)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 24		SLOT														

The bit designation shall be as follows:

BIT	DESIGNATION
0-14	SLOT RANGE = 0 - 32767
15	NOT USED

40.5.2.12 JTIDS Time of Day Word 3 (Block 2, Word 25)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 25							SEQ			EPOCH						

The bit designation shall be as follows:

BIT	DESIGNATION
0-6	EPOCH RANGE = 0 - 112
7-9	SEQUENCE (SEQ) RANGE = 0 - 7
10-15	NOT USED

40.5.2.13 Number of Illegal Instruction Interrupts. (Block 2, Word 26)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 26	NUMBER OF ILLEGAL INSTRUCTION INTERRUPTS															

BIT	DESIGNATION
0-15	NUMBER OF ILLEGAL INSTRUCTION INTERRUPTS LSB (BIT 0) = 1

40.5.2.14 Number of Illegal CPU Clock State Interrupts. (Block 2, Word 27)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 27	NUMBER OF ILLEGAL CPU CLOCK STATE INTERRUPTS															

BIT	DESIGNATION
0-15	NUMBER OF ILLEGAL CPU CLOCK STATE INTERRUPTS LSB (BIT 0) = 1

40.5.2.15 Loopback Message Type Failure Word (Block 2, Word 28)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 28			LBE	LBD	LBC	LBB	LBA	LB9	LB8	LB7	LB6	LB5	LB4	LB3	LB2	LB1

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = STANDARD FT UNCODED MESSAGE TYPE FAILURE (LB1)
1	LOGIC 1 = PACKED 2 DP-FT UNCODED MESSAGE TYPE FAILURE (LB2)
2	LOGIC 1 = PACK 2 DP-FT CODED MESSAGE TYPE FAILURE (LB3)
3	LOGIC 1 = PACKED 2 SP-FF CODED MESSAGE TYPE FAILURE (LB4)
4	LOGIC 1 = STANDARD FF CODED MESSAGE TYPE FAILURE (LB5)
5	LOGIC 1 = PACKED 2 DP-FF CODED MESSAGE TYPE FAILURE (LB6)

BIT	DESIGNATION
6	LOGIC 1 = STANDARD FT CODED MESSAGE TYPE FAILURE (LB7)
7	LOGIC 1 = PACKED 4 SP-FF CODED MESSAGE TYPE FAILURE (LB8)
8	LOGIC 1 = PACKED 2 SP-FT UNCODED MESSAGE TYPE FAILURE (LB9)
9	LOGIC 1 = PACKED 4 SP-FT UNCODED MESSAGE TYPE FAILURE (LBA)
10	LOGIC 1 = PACKED 4 SP-FT CODED MESSAGE TYPE FAILURE (LBB)
11	LOGIC 1 = PACKED 2 SP-FT CODED MESSAGE TYPE FAILURE (LBC)
12	LOGIC 1 = TEST RTT LOOPBACK FAILURE (LBD)
13	LOGIC 1 = RTT INT 2A MESSAGE TYPE FAILURE (LBE)
14-15	NOT USED

40.5.2.16 OTF Constant Frequency Offset State Words (Block 2, Word 29 and 30)

TYPE: REAL
UNITS: Nanoseconds per second
DEFINITION: Kalman Filter constant frequency offset state.

40.5.2.17 REL NAV Kalman Filter Status Word 1 (Block 2, Word 31)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 31	POS	FOS	SOS		CNC		PD	STYPE			KFR	KFA	RNKFS			

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	REL NAV KALMAN FILTER STATUS (RNKFS)

BIT 3 • 2 • 1 • 0

0 • 0 • 0 • 0	INITIALIZATION/NO FILTER OPERATION
0 • 0 • 0 • 1	NAVIGATION RESET
0 • 0 • 1 • 0	CLOCK BIAS INITIALIZATION
0 • 0 • 1 • 1	GRID ACQUISITION
0 • 1 • 0 • 0	SPARE
0 • 1 • 0 • 1	GEODETIC OBSERVATION PROCESSING
0 • 1 • 1 • 0	GEODETIC AND GRID OBSERVATION PROCESSING
0 • 1 • 1 • 1	NOT USED
. • . • . • .	
. • . • . • .	
1 • 1 • 1 • 1	NOT USED

4	LOGIC 1 = KALMAN FILTER ALTERATION (KFA)
5	LOGIC 1 = KALMAN FILTER RESET (KFR)
6-8	SYSTEM TYPE (STYPE)

BIT 8 • 7 • 6

0 • 0 • 0	INERTIAL
0 • 0 • 1	NON-INERTIAL
0 • 1 • 0	TOA ONLY (NO D/R)
0 • 1 • 1	NOT USED
. • . • .	
. • . • .	
1 • 1 • 1	NOT USED

9	PLATFORM DEFINITION (PD) LOGIC 0 = MOBILE LOGIC 1 = FIXED POINT
10	NOT USED

BIT	DESIGNATION
11	COMMUNITY NAV CONTROLLER (CNC) LOGIC 1 = GROUND POINT LOGIC 0 = MOBILE
12	NOT USED
13	LOGIC 1 = NON-NAV SYNC OBSERVATION SCREENED (SOS)
14	LOGIC 1 = GEO FIX OBSERVATION SCREENED (FOS)
15	LOGIC 1 = PPLI OBSERVATION SCREENED (POS)

40.5.2.18 Kalman Filter Quality Status Word (Block 2, Word 32)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 32		Q_{AR}			Q_{PR}				Q_{PG}				Q_T			

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	TIME QUALITY (Q_T)
4-7	GEODETIC POSITION QUALITY (Q_{PG})
8-11	RELATIVE POSITION QUALITY (Q_{PR})
12-14	RELATIVE AZIMUTH QUALITY (Q_{AR})
15	NOT USED

NOTE: SEE TABLE IV-IV FOR A DEFINITION OF THE ABOVE VARIABLES.

40.5.3 SICP Status Report (Block 3).

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	HOST AND RELAY INHIBIT STATUS															
wd 4	NOT USED															
wd 5	STN OF CURRENT NCS															
wd 6	VOICE A CHANNEL WORD 1															
wd 7	VOICE A CHANNEL WORD 2															
wd 8	VOICE A CHANNEL WORD 3															
wd 9	VOICE B CHANNEL WORD 1															
wd 10	VOICE B CHANNEL WORD 2															
wd 11	VOICE B CHANNEL WORD 3															
wd 12	CONTROL CHANNEL WORD 1															
wd 13	CONTROL CHANNEL WORD 2															
wd 14	RESERVED FOR NICP/SICP USE															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 3

40.5.3.1 Host and Relay Inhibit Status Word. (Block 3, Word 3)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3														RI	TDF	HI

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = HOST INTERFACE INACTIVE (HI) (HOST DECLARED) NOT USED BY NAVY
1	TACTICAL DATA SYSTEM FAIL (TDF) LOGIC 1 = THE SICP HAS NOT RECEIVED A VALID TERMINAL INPUT MESSAGE IN THE LAST 12 SECONDS.
2	RELAY INHIBIT (RI) LOGIC 1 = RELAY INHIBIT IS ENABLED
3-15	NOT USED

40.5.3.2 Block 3, Word 4. Not used.

40.5.3.3 STN Of Current NCS Word. (Block 3, Word 5)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 5	NC	STN OF CURRENT NCS														

The bit designation shall be as follows:

BIT	DESIGNATION
0-14	STN OF CURRENT NCS 0 = NOT UNDER NCS CONTROL 1-32767 = TRACK NUMBER, AS SPECIFIED IN THE TADIL J TIDP, OF THE NCS
15	NCS CHANGE (NC) LOGIC 0 = NCS TN HAS NOT CHANGED

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.3.4 Voice A Channel Word 1. (Block 3, Word 6)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 6	AC					STAT			SN	VOICE A NET						

The bit designation shall be as follows:

BIT	DESIGNATION
0-6	VOICE A NET NUMBER 127 = CHANNEL IS DEACTIVATED 0-126 = SELECTED NET FOR VOICE A CHANNEL
7	SPECIAL NET (SN) LOGIC 0 = NORMAL NET LOGIC 1 = SPECIAL NET
8-10	CHANNEL STATUS (STAT) BITS 10 • 9 • 8 •••••••••••• 0 • 0 • 0 OPERATIONAL 0 • 0 • 1 NET SELECTED SHUTDOWN 0 • 1 • 0 BIT-DETECTED FAULT 0 • 1 • 1 NO STATEMENT 1 • 0 • 0 SLOT ASSIGNMENT(S) NOT • • COMPATIBLE WITH VOICE • • SELECTION 1 • 0 • 1 INSUFFICIENT SLOTS DUE TO PACK 1 • 1 • 0 SPARE 1 • 1 • 1 SPARE FOR NAVY SHIPBOARD: For the Navy Shipboard unique field, see Appendix VIII. FOR NAVY AIRBORNE: For the Navy Airborne unique field, see Appendix VIII.
11-14	NOT USED
15	VOICE A CHANNEL CHANGE (AC) LOGIC 0 = NET, CHANNEL STATUS, MSEC AND SUPPRESSION HAVE NOT CHANGED LOGIC 1 = NET, CHANNEL STATUS, SUPPRESSION OR MSEC HAS CHANGED

STATUS BLOCK 3

40.5.3.5 Voice A Channel Word 2. (Block 3, Word 7)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 7										VOICE A MSEC						

The bit designation shall be as follows:

BIT	DESIGNATION
0-6	MSEC CRYPTOVARIABLE LABEL (VOICE A MSEC) 0 = USE THE MSEC LOGICAL LABEL PROVIDED IN THE SLOT ASSIGNMENT BLOCK 1-127 = MSEC LOGICAL LABEL

NOTE: THIS VALUE IS VALID IF THE SN VARIABLE IN WORD 6 IS LOGIC 0.

7-15	NOT USED

40.5.3.6 Voice A Channel Word 3. (Block 3, Word 8)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 8							RATE			M D	SSAEA					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	VOICE A SUPPRESSED SLOT ASSIGNMENT NUMBER (SSAEA) 0 - 63 TIME SLOT BLOCK POINTER

NOTE: THIS VARIABLE IS VALID IF SS (IN BIT 15) IS LOGIC 1.

6	SUPPRESSION MODULUS (MD) LOGIC 0 = SUPPRESSION MODULUS OF 3 LOGIC 1 = SUPPRESSION MODULUS OF 6

NOTE: THIS VARIABLE IS VALID IF SS (IN BIT 15) IS LOGIC 1.

7	Not Used

BIT	DESIGNATION
8-9	CHANNEL RATE (RATE) - NAVY ONLY BITS 9 • 8 •••••• 0 • 0 16 KBPS 1 • 1 NO STATEMENT THE OTHER VALUES ARE NOT USED BY NAVY
10-15	NOT USED

40.5.3.7 Voice B Channel Word 1. (Block 3, Word 9)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 9	B C					STAT			S N	VOICE B NET						

The bit designation shall be as follows:

BIT	DESIGNATION
	THE CODING FOR VOICE B CHANNEL WORD 1 SHALL BE IDENTICAL TO THAT OF VOICE A CHANNEL WORD 1.

40.5.3.8 Voice B Channel Word 2. (Block 3, Word 10)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 10										VOICE B MSEC						

The bit designation shall be as follows:

BIT	DESIGNATION
	THE CODING FOR VOICE B CHANNEL WORD 2 SHALL BE IDENTICAL TO THAT OF VOICE A CHANNEL WORD 2.

40.5.3.9 Voice B Channel Word 3. (Block 3, Word 11)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 11	SLS	PT	PL				RATE		CD	MD	SSAEB					

The bit designation shall be as follows:

BIT	DESIGNATION
	THE CODING FOR VOICE B CHANNEL WORD 3 SHALL BE IDENTICAL TO THAT OF VOICE A CHANNEL WORD 3.

40.5.3.10 Control Channel Word 1. (Block 3, Word 12)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 12	CC					STAT			SN	CONTROL NET						

The bit designation shall be as follows:

BIT	DESIGNATION
	THE CODING FOR CONTROL CHANNEL WORD 1 SHALL BE IDENTICAL TO THAT OF VOICE A CHANNEL WORD 1.

40.5.3.11 Control Channel Word 2. (Block 3, Word 13)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 13										CONTROL MSEC						

The bit designation shall be as follows:

BIT	DESIGNATION
	THE CODING FOR CONTROL CHANNEL WORD 2 SHALL BE IDENTICAL TO THAT OF VOICE A CHANNEL WORD 2.

40.5.3.12 (Block 3, Word 14). Reserved for NICP/SICP use.

40.5.4 D/R Navigation Data (Block 4).

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	D/R TIME TAG															
wd 4	D/R INTRACYCLE TIME															
wd 5	D/R VALIDITY WORD															
wd 6	LATITUDE (D/R) WORD 1															
wd 7	LATITUDE (D/R) WORD 2															
wd 8	LONGITUDE (D/R) WORD 1															
wd 9	LONGITUDE (D/R) WORD 2															
wd 10	ALTITUDE (D/R) WORD 1															
wd 11	ALTITUDE (D/R) WORD 2															
wd 12	X SPEED (D/R) WORD 1															
wd 13	X SPEED (D/R) WORD 2															
wd 14	Y SPEED (D/R) WORD 1															
wd 15	Y SPEED (D/R) WORD 2															
wd 16	Z SPEED (D/R) WORD 1															
wd 17	Z SPEED (D/R) WORD 2															
wd 18	X-AXIS AZIMUTH WORD 1															
wd 19	X-AXIS AZIMUTH WORD 2															
wd 20	Δ Vx WORD 1															
wd 21	Δ Vx WORD 2															
wd 22	Δ Vy WORD 1															
wd 23	Δ Vy WORD 2															
wd 24	Δ Vz WORD 1															
wd 25	Δ Vz WORD 2															
wd 26	Ωx WORD 1															
wd 27	Ωx WORD 2															
wd 28	Ωy WORD 1															
wd 29	Ωy WORD 2															
wd 30	Ωz WORD 1															
wd 31	Ωz WORD 2															
wd 32	NOT USED															

STATUS BLOCK 4

40.5.4.1 D/R Time Tag Word. (Block 4, Word 3)

RANGE: 0 to 65535 slots
LSB: One slot (7.8125 X 10^{-3} seconds)
DEFINITION: Time tag of slot during which data was valid

40.5.4.2 D/R Intracycle Time Word (Block 4, Word 4)

(In 2's complement)

RANGE: -32768 TO +32767
LSB: 7.8125 x 10^{-6} seconds
REPRESENTED RANGE: ∀ 256 Milliseconds
DEFINITION: Time of validity of D/R data with respect to the slot interrupt at the beginning of the time tag slot.

40.5.4.3 D/R Validity Word (Block 4, Word 5)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 5	NS		DM				V 9	V 8	V 7	V 6	V 5	V 4	V 3	V 2	V 1	V 0

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = LATITUDE VALID (V0)
1	LOGIC 1 = LONGITUDE VALID (V1)
2	LOGIC 1 = ALTITUDE VALID (V2)
3	LOGIC 1 = X AND Y SPEEDS VALID (V3)
4	LOGIC 1 = Z SPEED VALID (V4)
5	LOGIC 1 = X-AXIS AZIMUTH VALID (V5)
6	LOGIC 1 = ΔVx, ΔVy, AND ΔVz VALID (V6)
7	LOGIC 1 = ΩX, ΩY, AND ΩZ VALID (V7)
8	LOGIC 1 = X, Y, AND Z AXIS SLEW VALID (V8)
9	LOGIC 1 = LEVER ARM VALID (V9)
10-11	RESERVED FOR SICP USE

BIT	DESIGNATION
12-13	DAMPING MODE (DM)

BITS 13 • 12

0 • 0	NO DAMPING
0 • 1	FREE INERTIAL
1 • 0	DAMPED MODE 1
1 • 1	DAMPED MODE 2

14-15 NAV STATE (NS)

BITS 15 • 14

0 • 0	START-UP WITH D/R
0 • 1	NORMAL
1 • 0	FLYWHEEL
1 • 1	NOT USED

NOTE: X AND Y SPEEDS VALIDITY IS RELEVANT ONLY IF DAMPED MODE IS NO DAMPING; OTHERWISE, THIS BIT SHALL BE SET TO INVALID.

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.4.4 Latitude (D/R) Words (Block 4, Words 6 and 7) BAM (See Table IV-III)

DEFINITION: D/R latitude estimate; valid at intracycle time (Word 4). Also used to provide latitude set-point for non-inertial systems able to provide it.

40.5.4.5 Longitude (D/R) Words (Block 4, Words 8 and 9) BAM (See Table IV-III)

DEFINITION: D/R longitude estimate; valid at intracycle time (Word 4)

40.5.4.6 Altitude (D/R) Words (Block 4, Words 10 and 11) REAL (See Table IV-II)

UNITS: Feet
DEFINITION: NAV system estimate of Antenna Height above MSL; valid at intracycle time (Word 4)

40.5.4.7 X Speed (D/R) Words (Block 4, Words 12 and 13) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: System estimate of speed in X direction (if NAV state is "START UP" or damped mode is "NO DAMPING")

Reference speed in X direction (if NAV state is not "START UP" and damped mode is not "NO DAMPING").

X, Y, Z are local vertical earth-referenced coordinates, nominally north, west, up, respectively, when X-axis azimuth is 0.0 degrees.

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.4.8 Y Speed (D/R) Words (Block 4, Words 14 and 15) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: System estimate of speed in Y direction.

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique value of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique value of this word, see Appendix VIII.

40.5.4.9 Z Speed (D/R) Words (Block 4, Words 16 and 17) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: System estimate of speed in Z direction.

40.5.4.10 X-Axis Azimuth Words (Block 4, Words 18 and 19) BAM (See Table IV-III)

DEFINITION: Direction of X axis with respect to true north. Positive is counterclockwise.

40.5.4.11 ΔVx Words (Block 4, Words 20 and 21) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Inertial change in X direction speed since previous D/R time of validity.

40.5.4.12 ΔVy Words (Block 4, Words 22 and 23) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Inertial change in Y direction speed since previous D/R time of validity.

40.5.4.13 ΔVz Words (Block 4, Words 24 and 25) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Inertial change in Z direction speed since previous D/R time of validity.

40.5.4.14 Ωx Words (Block 4, Words 26 and 27) REAL (See Table IV-II)

UNITS: Radians per second
DEFINITION: Total torquing rate about X axis

40.5.4.15 Ωy Words (Block 4, Words 28 and 29) REAL (See Table IV-II)

UNITS: Radians per second
DEFINITION: Total torquing rate about Y axis

40.5.4.16 Ωz Words (Block 4, Words 30 and 31) REAL (See Table IV-II)

UNITS: Radians per second
DEFINITION: Total torquing rate about Z axis

40.5.5 D/R Navigation Data. (Block 5)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	D/R INTRACYCLE TIME															
wd 4	X SLEW ANGLE WORD 1															
wd 5	X SLEW ANGLE WORD 2															
wd 6	Y SLEW ANGLE WORD 1															
wd 7	Y SLEW ANGLE WORD 2															
wd 8	Z SLEW ANGLE WORD 1															
wd 9	Z SLEW ANGLE WORD 2															
wd 10	LEVER ARM X COMPONENTS (l_x)															
wd 11	LEVER ARM Y COMPONENTS (l_y)															
wd 12	LEVER ARM Z COMPONENTS (l_z)															
wd 13	UNCERTAINTY WORD															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 5

40.5.5.1 D/R Intracycle Time Word (Block 5, Word 3)

Same as Block 4, Word 4. Note that the Time Tag corresponding to this block is identical to the one given in Block 4, Word 3.

40.5.5.2 X Slew Angle Words (Block 5, Words 4 and 5) BAM (See Table IV-III).

DEFINITION: Applied correction about D/R X axis

40.5.5.3 Y Slew Angle Words (Block 5, Words 6 and 7) BAM (See Table IV-III).

DEFINITION: Applied correction about D/R Y axis

40.5.5.4 Z Slew Angle Words (Block 5, Words 8 and 9) BAM (See Table IV-III).

DEFINITION: Applied correction about D/R Z axis

40.5.5.5 Lever Arm Words (Block 5, Words 10-12)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 10	l_x - ANTENNA B								l_x - ANTENNA A							
wd 11	l_y - ANTENNA B								l_y - ANTENNA A							
wd 12	l_z - ANTENNA B								l_z - ANTENNA A							

The bit designation shall be as follows:

(l_x, l_y, l_z) define the components of the lever arm from the NAV system in use to the Antenna A (bits 0-7) and Antenna B (bits 8-15) in Platform X, Y, Z coordinates.

DESCRIPTION: 8 bits in two's complement
MSB: -1024
LSB: 8
UNITS: FEET
RANGE: -1024 to 1016

NOT USED BY NAVY AIRBORNE

STATUS BLOCK 5

40.5.5.6 Uncertainty Word (Block 5, Word 13).

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 13		VELOCITY UNCERTAINTY					HEIGHT UNCERTAINTY					HORIZONTAL POSITION UNCERTAINTY				

BITS	DESIGNATION
0-4	HORIZONTAL POSITION UNCERTAINTY (Pu) DEFINITION: ONE-SIGMA UNCERTAINTY IN LATITUDE AND LONGITUDE. CODING 0 UNCERTAINTY IS GREATER THAN 60,000 FT 1-31 REPORTED VALUE IS THE GREATEST NUMBER FOR WHICH 60,000 X $1.575^{(1-Pu)}$ FEET IS GREATER THAN OR EQUAL TO THE HORIZONTAL POSITION UNCERTAINTY. (SEE TABLE III-I)
5-9	HEIGHT UNCERTAINTY (Hu) DEFINITION: ONE-SIGMA UNCERTAINTY IN HEIGHT. CODING 0 UNCERTAINTY IS GREATER THAN 60,000 FT 1-31 REPORTED VALUE IS THE GREATEST NUMBER FOR WHICH 60,000 X $1.575^{(1-Hu)}$ FEET IS GREATER THAN OR EQUAL TO THE HEIGHT UNCERTAINTY. (SEE TABLE III-I)
10-14	VELOCITY UNCERTAINTY (Vu) DEFINITION: ONE-SIGMA UNCERTAINTY IN HORIZONTAL COMPONENTS OF VELOCITY. CODING 0 UNCERTAINTY IS GREATER THAN 300,000 FT/SEC 1-31 REPORTED VALUE IS THE GREATEST NUMBER FOR WHICH 400 X $0.75^{(Vu)}$ FEET/SEC. IS GREATER THAN OR EQUAL TO THE VELOCITY UNCERTAINTY.
15	NOT USED

40.5.6 JTIDS Navigation Data. (Block 6)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	TIME TAG															
wd 4	GEODETIC LATITUDE WORD 1															
wd 5	GEODETIC LATITUDE WORD 2															
wd 6	GEODETIC LONGITUDE WORD 1															
wd 7	GEODETIC LONGITUDE WORD 2															
wd 8	GEODETIC ALTITUDE WORD 1															
wd 9	GEODETIC ALTITUDE WORD 2															
wd 10	GEODETIC X SPEED WORD 1															
wd 11	GEODETIC X SPEED WORD 2															
wd 12	GEODETIC Y SPEED WORD 1															
wd 13	GEODETIC Y SPEED WORD 2															
wd 14	GEODETIC AZIMUTH CORRECTION WORD 1															
wd 15	GEODETIC AZIMUTH CORRECTION WORD 2															
wd 16	EAST-WEST RADIUS OF CURVATURE WORD 1															
wd 17	EAST-WEST RADIUS OF CURVATURE WORD 2															
wd 18	Pu WORD 1															
wd 19	Pu WORD 2															
wd 20	Pv WORD 1															
wd 21	Pv WORD 2															
wd 22	Pw WORD 1															
wd 23	Pw WORD 2															
wd 24	U SPEED WORD 1															
wd 25	U SPEED WORD 2															
wd 26	V SPEED WORD 1															
wd 27	V SPEED WORD 2															
wd 28	W SPEED WORD 1															
wd 29	W SPEED WORD 2															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

40.5.6.1 Time Tag Word (Block 6, Word 3)

Format and definition same as Block 4, Word 3

40.5.6.2 Geodetic Latitude (λ) Words (Block 6, Words 4 and 5) BAM (See Table IV-III)

DEFINITION: Present geodetic latitude (WGS-84). (If Navy platform, implies WGS-72).

40.5.6.3 Geodetic Longitude (ϕ) Words (Block 6, Words 6 and 7) BAM (See Table IV-III)

DEFINITION: Present geodetic longitude (WGS-84). (If Navy platform, implies WGS-72).

40.5.6.4 Geodetic Altitude (h) Words (Block 6, Words 8 and 9) REAL (See Table IV-II)

UNITS: Feet
DEFINITION: Present altitude referenced to mean sea level (MSL) (WGS-84). (If Navy platform, implies WGS-72).

40.5.6.5 Geodetic X Speed (Vx) Words (Block 6, Words 10 and 11) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Estimated speed in X direction

X and Y are local vertical earth-referenced coordinates nominally north and west, respectively, when wander angle is 0.0 degrees.

40.5.6.6 Geodetic Y Speed (Vy) Words (Block 6, Words 12 and 13) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Estimated speed in Y direction

X and Y are local vertical earth-referenced coordinates nominally north and west, respectively, when wander angle is 0.0 degrees.

40.5.6.7 Geodetic Azimuth Correction (Θz) Words (Block 6, Words 14 and 15) BAM (See Table IV-III)

DEFINITION: The angular difference between the platform X axis and the Terminal's estimate of reference X-axis. The sense is positive counter-clockwise from platform X axis to reference X axis.

STATUS BLOCK 6

40.5.6.8 East-West Radius of Curvature (r_{ew}) Words (Block 6, Words 16 and 17) REAL (See Table IV-II)

UNITS: Feet
DEFINITION: Length of line segment, normal to the WGS-84 spheroid, from present position to spheroid axis of rotation. (If Navy platform, implies WGS-72).

40.5.6.9 Pu Words (Block 6, Words 18 and 19) REAL (See Table IV-II)

UNITS: Feet
DEFINITION: U component of relative position in grid defined by estimated grid origin and estimated relative grid azimuth. (SEE 40.11)

40.5.6.10 Pv Words (Block 6, Words 20 and 21) REAL (See Table IV-II)

UNITS: Feet
DEFINITION: V component of relative position in grid defined by estimated grid origin and estimated relative grid azimuth. (SEE 40.11)

40.5.6.11 Pw Words (Block 6, Words 22 and 23) REAL (See Table IV-II)

UNITS: Feet
DEFINITION: W component of relative position in grid defined by estimated grid origin and estimated relative grid azimuth. (SEE 40.11)

40.5.6.12 U Speed (Vu) Words (Block 6, Words 24 and 25) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Speed in relative grid U direction

40.5.6.13 V Speed (Vv) Words (Block 6, Words 26 and 27) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Speed in relative grid V direction

40.5.6.14 W Speed (Vw) Words (Block 6, Words 28 and 29) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Speed in relative grid W direction

40.5.7 JTIDS Navigation Data. (Block 7)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NOT USED															
wd 4	NOT USED															
wd 5	ESTIMATED GRID-ORIGIN LATITUDE WORD 1															
wd 6	ESTIMATED GRID-ORIGIN LATITUDE WORD 2															
wd 7	ESTIMATED GRID-ORIGIN LONGITUDE WORD 1															
wd 8	ESTIMATED GRID-ORIGIN LONGITUDE WORD 2															
wd 9	ESTIMATED RELATIVE-GRID AZIMUTH WORD 1															
wd 10	ESTIMATED RELATIVE-GRID AZIMUTH WORD 2															
wd 11	RESERVED FOR COMMON GRID ORIGIN LATITUDE WORD 1															
wd 12	RESERVED FOR COMMON GRID ORIGIN LATITUDE WORD 2															
wd 13	RESERVED FOR COMMON GRID ORIGIN LONGITUDE WORD 1															
wd 14	RESERVED FOR COMMON GRID ORIGIN LONGITUDE WORD 2															
wd 15	RESERVED FOR COMMON GRID ID															
wd 16	NORTH SPEED OF MEDIUM OR X-DAMPING STATE WORD 1															
wd 17	NORTH SPEED OF MEDIUM OR X-DAMPING STATE WORD 2															
wd 18	WEST SPEED OF MEDIUM OR Y-DAMPING STATE WORD 1															
wd 19	WEST SPEED OF MEDIUM OR Y-DAMPING STATE WORD 2															
wd 20	X-AXIS MISALIGNMENT CORRECTION Θ_x WORD 1															
wd 21	X-AXIS MISALIGNMENT CORRECTION Θ_x WORD 2															
wd 22	Y-AXIS MISALIGNMENT CORRECTION Θ_y WORD 1															
wd 23	Y-AXIS MISALIGNMENT CORRECTION Θ_y WORD 2															
wd 24	WANDER ANGLE WORD 1															
wd 25	WANDER ANGLE WORD 2															
wd 26	RELATIVE-GRID REFERENCE ANGLE WORD 1															
wd 27	RELATIVE-GRID REFERENCE ANGLE WORD 2															
wd 28	REL NAV KALMAN FILTER STATUS WORD 1															
wd 29	TRANSMITTED QUALITY STATUS WORD															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

40.5.7.1 Block 7, Words 3 and 4. NOT USED

40.5.7.2 Estimated Grid-Origin Latitude (λ_{oe}) Words (Block 7, Words 5 and 6) BAM (See Table IV-III)

DEFINITION: Grid origin latitude used to convert relative positions in the grid to best estimate of geodetic position.

40.5.7.3 Estimated Grid-Origin Longitude (ϕ_{oe}) Words (Block 7, Words 7 and 8) BAM (See Table IV-III)

DEFINITION: Grid origin longitude used to convert relative positions in the grid to best estimate of geodetic position.

40.5.7.4 Estimated Relative-Grid Azimuth (ß) Words (Block 7, Words 9 and 10) BAM (See Table IV-III)

DEFINITION: The angular difference between the north axis and the relative-grid v axis at the estimated grid origin. The sense is positive counterclockwise from north axis to grid v axis.

40.5.7.5 through 40.5.7.7 Reserved Words for Common Grid Origin (Block 7, Words 11 to 15). Reserved for common grid-origin latitude, common grid-origin longitude and common grid ID.

40.5.7.8 North Speed of Medium (Vwn) Words or X-Damping State (Vbx) Words 1 and 2. (Block 7, Words 16 and 17) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Estimated X-velocity damping error (inertial systems only) or estimated water motion speed in North direction (non-inertial systems only).

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

STATUS BLOCK 7

40.5.7.9 West Speed of Medium (Vww) Words or Y-Damping State (Vby) Words 1 and 2. (Block 7, Words 18 and 19) REAL (See Table IV-II)

UNITS: Feet per second
DEFINITION: Estimated y-velocity damping error (inertial systems only) or estimated water motion speed in West direction (non-inertial systems only).

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.7.10 X-Axis Misalignment Correction (Θx) Words (Block 7, Words 20 and 21) BAM (See Table IV-III)

DEFINITION: Platform misalignment about the X-axis with respect to the terminal's estimated local level frame. The sense of the rotation is positive counter-clockwise from the terminal's local level frame to the platform frame (inertial systems only).

40.5.7.11 Y-Axis Misalignment Correction (Θy) Words (Block 7, Words 22 and 23) BAM (See Table IV-III)

DEFINITION: Platform misalignment about the Y-axis with respect to the terminal's estimated local level frame. The sense of the rotation is positive counter-clockwise from the terminal's local level frame to the platform frame (inertial systems only).

40.5.7.12 Wander Angle (α) Words (Block 7, Words 24 and 25) BAM (See Table IV-III)

DEFINITION: The angular difference between the north axis estimate and reference X-axis estimate. The sense is positive counterclockwise from north axis to X-axis.

40.5.7.13 Relative-Grid Reference Angle (α_g) Words (Block 7, Words 26 and 27) BAM (See Table IV-III)

DEFINITION: The angular difference between the north axis at the estimated grid origin and the north axis at the reference grid origin. The sense is positive counterclockwise from north axis at estimated grid origin to reference north axis.

STATUS BLOCK 7

40.5.7.14 Rel Nav Kalman Filter Status Word 1. (Block 7, Word 28)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 28	POS	FOS	SOS		CNC		PD	STYPE			KFR	KFA	RNKFS			

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	REL NAV KALMAN FILTER STATUS (RNKFS)

BIT 3 • 2 • 1 • 0

0 • 0 • 0 • 0	INITIALIZATION/ NO FILTER OPERATION
0 • 0 • 0 • 1	NAVIGATION RESET
0 • 0 • 1 • 0	CLOCK BIAS INITIALIZATION
0 • 0 • 1 • 1	GRID ACQUISITION
0 • 1 • 0 • 0	SPARE
0 • 1 • 0 • 1	GEODETIC OBSERVATION PROCESSING
0 • 1 • 1 • 0	GEODETIC AND GRID OBSERVATION PROCESSING

THE OTHER VALUES ARE NOT USED

4 LOGIC 1 = KALMAN FILTER ALTERATION (KFA)

5 LOGIC 1 = KALMAN FILTER RESET (KFR)

6-8 SYSTEM TYPE (STYPE)

BIT 8 • 7 • 6

0 • 0 • 0	INERTIAL
0 • 0 • 1	NON-INERTIAL
0 • 1 • 0	TOA ONLY (NO D/R)

THE OTHER VALUES ARE NOT USED

9 PLATFORM DEFINITION (PD)
LOGIC 0 = MOBILE
LOGIC 1 = FIXED POINT

10 NOT USED

BIT	DESIGNATION
11	COMMUNITY NAV CONTROLLER (CNC) LOGIC 1 = GROUND POINT LOGIC 0 = MOBILE
12	NOT USED
13	LOGIC 1 = NON-NAV SYNC OBSERVATION SCREENED (SOS)
14	LOGIC 1 = GEO FIX OBSERVATION SCREENED (FOS)
15	LOGIC 1 = PPLI OBSERVATION SCREENED (POS)

40.5.7.15 Transmitted Quality Status Word. (Block 7, Word 29)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 29		Q_{AR}			Q_{PR}				Q_{PG}				Q_T			

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	TIME QUALITY (Q_T)
4-7	GEODETIC POSITION QUALITY (Q_{PG})
8-11	RELATIVE POSITION QUALITY (Q_{PR})
12-14	RELATIVE AZIMUTH QUALITY (Q_{AR})
15	NOT USED

NOTE: SEE Table IV-V FOR A DEFINITION OF THE ABOVE VARIABLES.

40.5.8 BIT Status Report. (Block 8)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	TERMINAL FAIL DDP WORD 1															
wd 4	TERMINAL FAIL DDP WORD 2															
wd 5	TERMINAL FAIL R/T WORD 3															
wd 6	TERMINAL FAIL R/T WORD 4															
wd 7	TACAN FAIL R/T (TACAN) WORD 5 (NAVY AIRBORNE AND F-15 ONLY)															
wd 8	TERMINAL FAIL IU WORD 6 (F-15 ONLY)															
wd 9	TACAN FAIL IU (TACAN) WORD 7 (NAVY AIRBORNE AND F-15 ONLY)															
wd 10	TERMINAL FAIL BATTERY WORD 8															
wd 11	TERMINAL FAIL RF LOOPBACK WORD 9															
wd 12	TERMINAL FAIL IU WORD 10															
wd 13	MESSAGE STATUS WORD															
wd 14	LRU BIT AND STATUS SUMMARY WORD															
wd 15	SRA SUMMARY WORD (NOT USED FOR F-15 AND NAVY AIRBORNE)															
wd 16	SDU ALERT WORD															
wd 17	DEGRADED PERFORMANCE WORD															
wd 18	IPF FAIL SUMMARY WORD R/T-HPA															
wd 19	START-UP/INTERRUPT WORD															
wd 20	NICP/SICP DEGRADED OPERATION WORD															
wd 21	TERMINAL FAIL HPAG WORD 11 (NAVY SHIPBOARD AND AIRBORNE ONLY)															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

NOTE: STATUS BLOCK 8 INDICATIONS ARE RELEVANT ONLY WHEN ONGOING STATUS WORD 1 INDICATES A FAILURE OR DEGRADATION (STATUS BLOCK 1, WORD 3).

40.5.8.1 Terminal Fail DDP (TDMA) Word 1. (Block 8, Word 3)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	MBTESTF	IFLBFL	PTPMB	MBTEST		GMAF	GMF	CHF					NICEXC	ROMF	RAMF	CPUF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = NICP CPU FAIL (CPUF)
1	LOGIC 1 = NICP RAM FAIL (RAMF)
2	LOGIC 1 = NICP ROM FAIL (ROMF)
3	LOGIC 1 = NICP CPU TRAP FAILURE (NICEXC) (68030 ONLY)

NOTE: FOR THE NAVY SHIPBOARD AND NAVY AIRBORNE UNIQUE VALUE OF THIS BIT, see Appendix VIII.

4-7	SPARE
8	LOGIC 1 = CHRONOMETER FAIL (CHF)
9	LOGIC 1 = GLOBAL MEMORY TEST FAIL (GMF)
10	LOGIC 1 = GLOBAL MEMORY ADDRESS TEST FAIL (GMAF)
11	SPARE
12	LOGIC 1 = NICP/PTP MAILBOX TEST FAIL (MBTEST) DETERMINED BY THE PTP.
13	LOGIC 1 = NICP/PTP MAILBOX TEST FAIL (PTPMB). DETERMINED BY THE NICP.
14	LOGIC 1 = IF LOOPBACK FAIL (IFLBFL)
15	LOGIC 1 = SICP/NICP MAILBOX TEST FAILURE (MBTESTF). DETERMINED BY THE SICP.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

STATUS BLOCK 8

40.5.8.2 Terminal Fail DDP (TDMA) Word 2. (Block 8, Word 4)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 4	DRTIF	CORRF	PTPTEST	BBCF	PLLF	DIGLBFL	CPSMF	PTPFL	RSEDF	SDDF	CTPF	XMITF	OSCF	BITBF	BITRF	RTBF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = REFERENCE TIME BASE FAIL (RFBF)
1	LOGIC 1 = R SUPPLY FAIL (BITRF)
2	LOGIC 1 = B SUPPLY FAIL (BITBF)
3	LOGIC 1 = OSCILLATOR FAIL (OSCF)
4	LOGIC 1 = XMIT TIMING AND CONTROL FAIL (XMITF)
5	LOGIC 1 = CTP FAIL (CTPF)
6	LOGIC 1 = SYNC DATA DET FAIL (SDDF)
7	LOGIC 1 = RSED FAIL (RSEDF)
8	LOGIC 1 = PTP FAIL (PTPFL)
9	LOGIC 1 = CPSM FAIL (CPSMF)
10	LOGIC 1 = DIGITAL LOOPBACK FAIL (DIGLBFL)
11	LOGIC 1 = RFG FAIL (PLLF)
12	LOGIC 1 = BASEBAND CONVERTER FAIL (BBCF)

BIT	DESIGNATION
13	LOGIC 1 = PTP SELF TEST FAIL (PTPTEST)
14	LOGIC 1 = CORRELATOR FAIL (CORRF)
15	LOGIC 1= DDP-R/T INTERFACE FAIL (DRTIF)

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.3 Terminal Fail R/T (TDMA) Word 3. (Block 8, Word 5)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 5					TRTT	CPSMD			TSDIPF				TMWAFL	RSCI	SYNTHF	RCVRF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = RECEIVER FAIL (RCVRF)
1	LOGIC 1 = SYNTHESIZER FAIL (SYNTHF)
2	LOGIC 1 = RECEIVER/SYNTHESIZER CIRCUMVENTION IN EFFECT (RSCI)
3	LOGIC 1 = TUNE MODE WRAPAROUND FAIL (TMWAFL)
4-6	SPARE
7	LOGIC 1 = TRANSMISSION SHUTDOWN DUE TO IPF FAILURE (TSDIPF)
8-9	NOT USED
10	LOGIC 1 = CPSM NOT DETECTED (CPSMD)
11	LOGIC 1 = TEST RTT LOOPBACK FAILURE (TRTT)
12-15	SPARE

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.4 Terminal Fail R/T (TDMA) Word 4. (Block 8, Word 6)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 6	HISS	HISL	RTSRUFL				PAOTF		POANTA	POANTB		IFFF	OOBFF	1030MF	PWF	RTTDMAF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = R/T TDMA FAIL (RTTDMAG)
1	LOGIC 1 = PULSE WIDTH FAIL (PWF)
2	LOGIC 1 = 1030/1090 MONITOR FAIL (1030MF)
3	LOGIC 1 = OUT-OF-BOUNDS FREQUENCY FAIL (OOBFF)
4	LOGIC 1 = IFF FREQUENCY COUNTER FAIL (IFFF)
5	SPARE
6	LOGIC 1 = Po ANT B > +1 dB or < -3 dB (POANTB)
7	LOGIC 1 = Po ANT A > +1 dB or < -3 dB (POANTA)
8	NOT USED
9	LOGIC 1 = PA OVER TEMPERATURE (PAOTF)
10-12	SPARE
13	LOGIC 1 = R/T SRU FAIL (RTSRUFL)
14	LOGIC 1 = LONG TERM HISTOGRAM FAIL (HISL)

BIT	DESIGNATION
15	LOGIC 1 = SHORT TERM HISTOGRAM FAIL (HISS)

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.5 TACAN Fail R/T (TACAN) Word 5. (Block 8, Word 7) F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 7	PWR UP F	AGC F	REC SENS F	PWR AMP F	SYNTH F	RAM F	ROM F	CPU F	NO ACK						FAIL IND	

The bit designation shall be as follows:

BIT	DESIGNATION
0	SPARE
1	FAILURE INDICATOR (FAIL IND) LOGIC 1 = TEST FAILURE LOGIC 0 = GOOD RADIO
2-6	NOT USED
7	LOGIC 1 = NO R/T ACKNOWLEDGEMENT (NO ACK)
8	LOGIC 1 = CPU FAILURE (CPUF)
9	LOGIC 1 = ROM FAILURE (ROMF)
10	LOGIC 1 = RAM FAILURE (RAMF)
11	LOGIC 1 = SYNTHESIZER FAILURE LOSS OF LOCK (SYNTHF)
12	LOGIC 1 = POWER LEVEL (ENHANCED TACAN) FAILURE (PWR AMP F)
13	LOGIC 1 = RECEIVER SENSITIVITY FAILURE (REC SENSF)
14	LOGIC 1 = AGC FUNCTION FAILURE (AGCF)
15	LOGIC 1 = POWER-UP SELF TEST FAILURE (PWR UP F)

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

STATUS BLOCK 8

40.5.8.6 Terminal Fail IU (TDMA) Word 6. (Block 8, Word 8)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 8			SICPST	CTPWF	PTPWF	RTIF	DDPIF	IUIF	SRUFM	TDMAF		MUXF				BTCDWA

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = BIT CARD WRAP AROUND FAIL (BTCDWA) (ARMY ONLY)
1-3	NOT USED
4	LOGIC 1 = MUX FAIL (MUXF)
5	NOT USED
6	LOGIC 1 = TAILORED TDMA FAIL (TTDMAF) (F-15 ONLY)
7	LOGIC 1 = SRA INITIATE IN FALSE MODE (SRAFM) (ARMY ONLY)
8	LOGIC 1 = IU FLAG WRAPAROUND INDICATION FALSE (IUIF) (ARMY ONLY)
9	LOGIC 1 = DDP FLAG WRAPAROUND INDICATION FALSE (DDPIF) (ARMY ONLY)
10	LOGIC 1 = RT FLAG WRAPAROUND INDICATION FALSE (RTIF) (ARMY ONLY)
11	LOGIC 1 = PTP BIT INIT WRAPAROUND FAIL (PTPWF) (ARMY ONLY)

BIT	DESIGNATION
12	LOGIC 1 = CTP BIT INIT WRAPAROUND FAIL (CTPWF) (ARMY ONLY)
13	LOGIC 1 = SICP SELF TEST FAIL (SICPST)
14-15	SPARE

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.7 TACAN Fail IU (TACAN) Word 7. (Block 8, Word 9)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 9							TACF									

The bit designation shall be as follows:

BIT	DESIGNATION
0-8	NOT USED
9	LOGIC 1 = TACAN IU FAIL (TACF) (F-15 ONLY)
10-15	NOT USED

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.8.8 Terminal Fail Battery Word 8. (Block 8, Word 10)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 10										BSTIF						

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	SPARE
6	LOGIC 1 = NICAD BATTERY FAIL (BSTIF)
7-15	SPARE

40.5.8.9 Terminal Fail RF Loopback (TDMA) Word 9. (Block 8, Word 11)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 11	SLBSTAT		LBE	LBD	LBC	LBB	LBA	LB9	LB8	LB7	LB6	LB5	LB4	LB3	LB2	LB1

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = STANDARD FT UNCODED MESSAGE TYPE FAILURE (LB1)
1	LOGIC 1 = PACKED 2 DP FT UNCODED MESSAGE TYPE FAILURE (LB2)
2	LOGIC 1 = PACKED 2 DP FT CODED MESSAGE TYPE FAILURE (LB3)
3	LOGIC 1 = PACKED 2 SP FF CODED MESSAGE TYPE FAILURE (LB4)
4	LOGIC 1 = STANDARD FF CODED MESSAGE TYPE FAILURE (LB5)
5	LOGIC 1 = PACKED 2 DP FF CODED MESSAGE TYPE FAILURE (LB6)
6	LOGIC 1 = STANDARD FT CODED MESSAGE TYPE FAILURE (LB7)
7	LOGIC 1 = PACKED 4 SP FF CODED MESSAGE TYPE FAILURE (LB8)
8	LOGIC 1 = PACKED 2 SP FT UNCODED MESSAGE TYPE FAILURE (LB9)
9	LOGIC 1 = PACKED 4 SP FT UNCODED MESSAGE TYPE FAILURE (LBA)
10	LOGIC 1 = PACKED 4 SP FT CODED MESSAGE TYPE FAILURE (LBB)
11	LOGIC 1 = PACKED 2 SP FT CODED MESSAGE TYPE FAILURE (LBC)

STATUS BLOCK 8

BIT	DESIGNATION
12	LOGIC 1 = TEST RTT LOOPBACK FAILURE (LBD)
13	LOGIC 1 = RTT INT 2A MESSAGE TYPE FAILURE (LBE)
14-15	CURRENT LOOPBACK STATUS (SLBSTAT)

BIT 15 • 14

0 • 0 TRANSMITTED: NO ERRORS
0 • 1 LOOPBACK DECODE FAIL
1 • 0 TOA COMPARISON FAIL
1 • 1 NO LOOPBACK RECEIVED

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.10 Terminal Fail IU (TDMA) Word 10. (Block 8, Word 12)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 12								VPTWD2F	VPTWD1F	V2F	V1F	TIOF		SICCPU	SICROM	SICRAM

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = SICP RAM FAIL (SICRAM)
1	LOGIC 1 = SICP ROM FAIL (SICROM)
2	LOGIC 1 = SICP CPU TRAP FAILURE (SICCPU) (68030 ONLY)
3	NOT USED

STATUS BLOCK 8

BIT	DESIGNATION
4	LOGIC 1 = TAILORED I/O FAIL (TIOF) - NAVY AIRBORNE AND F-15 ONLY
5	LOGIC 1 = VOICE 1 FAIL (V1F)
6	LOGIC 1 = VOICE 2 FAIL (V2F)
7	LOGIC 1 = VOICE PROCESSOR TEST WORD 1 FAIL (VPTWD1F)
8	LOGIC 1 = VOICE PROCESSOR TEST WORD 2 FAIL (VPTWD2F)
9-15	SPARE

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.11 Message Status Word. (Block 8, Word 13)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 13					TMF				MNA		NRTTR	NMESS	MER			

The bit designation shall be as follows:

BIT	DESIGNATION
0-2	NOT USED
3	LOGIC 1 = UNCORRECTABLE MESSAGE ERROR RATE (MER)
4	LOGIC 1 = NO MESSAGE RECEPTION (NMESS)
5	LOGIC 1 = NO RESPONSE TO RTT INTERROGATIONS (NRTTR)
6	NOT USED
7	LOGIC 1 = MESSAGE NOT ACKNOWLEDGED (MNA)
8-10	NOT USED
11	LOGIC 1 = TEST MESSAGE FAIL (TMF)
12-15	NOT USED

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.12 LRU BIT and Status Summary Word. (Block 8, Word 14)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 14	WD 8, 12	WD 5, 6	WD 3, 4	WD 16	WD 11	BSTIF	DEGPR	MESSF	IPFF	SDUAL	RTF	IUF	DDRF	TACF	TDMAF	TERMF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = TERMINAL FAIL (TERMF)
1	LOGIC 1 = TDMA FAIL (TDMAF)
2	LOGIC 1 = TACAN FAIL (TACF)
3	LOGIC 1 = DDP FAIL (DDPF)
4	LOGIC 1 = IU FAIL (IUF)
5	LOGIC 1 = R/T FAIL (RTF)
6	LOGIC 1 = SDU ALERT (SDUAL)
7	LOGIC 1 = IPF FAIL (IPFF)
8	LOGIC 1 = MESSAGE FAIL (MESSF)
9	LOGIC 1 = DEGRADED PERFORMANCE (DEGPR)
10	LOGIC 1 = NICAD BATTERY FAIL (BSTIF)
11	LOGIC 1 = ANY BIT SET IN BLOCK 8, WORD 11 (WD 11)
12	LOGIC 1 = ANY BIT SET IN BLOCK 8, WORD 16 (WD 16)
13	LOGIC 1 = ANY BIT SET IN BLOCK 8, WORD 3 OR 4 (WD 3,4)

BIT	DESIGNATION
14	LOGIC 1 = ANY BIT SET IN BLOCK 8, WORD 5 OR 6 (WD 5,6)
15	LOGIC 1 = ANY BIT SET IN BLOCK 8, WORD 8 OR 12 (WD 8,12)

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.13 SRU Summary Word. (Block 8, Word 15) (NOT USED FOR F-15)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 15		UNIT			SRUTMPF				SRUSMPF				SRUMPF			

The bit designation shall be as follows:

BIT	DESIGNATION

0-3 SRU MOST PROBABLE FAILURE INDICATOR (SRUMPF)

BIT 3 • 2 • 1 • 0	
0 • 0 • 0 • 0	NO FAILURE
0 • 0 • 0 • 1	CARD A1 FAILED
. • . • . • .	
. • . • . • .	
1 • 1 • 1 • 1	CARD A15 FAILED

4-7 SRU SECOND MOST PROBABLE FAILURE INDICATOR (SRUSMPF)

BIT 7 • 6 • 5 • 4	
0 • 0 • 0 • 0	NO FAILURE
0 • 0 • 0 • 1	CARD A1 FAILED
. • . • . • .	
. • . • . • .	
1 • 1 • 1 • 1	CARD A15 FAILED

8-11 SRU THIRD MOST PROBABLE FAILURE INDICATOR (SRUTMPF)

BIT 11 • 10 • 9 • 8	
0 • 0 • 0 • 0	NO FAILURE
0 • 0 • 0 • 1	CARD A1 FAILED
. • . • . • .	
. • . • . • .	
1 • 1 • 1 • 1	CARD A15 FAILED

BIT	DESIGNATION

12-14 UNIT - INDICATES THE WRA IN WHICH THE FAILED CARDS ARE LOCATED - NAVY SHIP ONLY

BIT 14 • 13 • 12	
0 • 0 • 0	NO FAILURE
0 • 0 • 1	R/T
0 • 1 • 0	DDP
0 • 1 • 1	IU
1 • 0 • 0	NOT USED
1 • 0 • 1	SDU
1 • 1 • 0	BATTERY
1 • 1 • 1	NOT USED

15 RESERVED FOR INTERNAL NICP/SICP USE

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.14 SDU Alert Word. (Block 8, Word 16)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 16		VAR 7	VAR 6	VAR 5	VAR 4	VAR 3	VAR 2	VAR 1	VAR 0	ALARM						

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	SPARE
6	LOGIC 1 = SDU ALARM
7	LOGIC 1 = SDU VAR 0 BAD
8	LOGIC 1 = SDU VAR 1 BAD
9	LOGIC 1 = SDU VAR 2 BAD
10	LOGIC 1 = SDU VAR 3 BAD
11	LOGIC 1 = SDU VAR 4 BAD
12	LOGIC 1 = SDU VAR 5 BAD
13	LOGIC 1 = SDU VAR 6 BAD
14	LOGIC 1 = SDU VAR 7 BAD
15	SPARE

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

40.5.8.15 Degraded Performance Word. (Block 8, Word 17)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 17									POANTA		POANTB		LPAO	VSWR	VSWR	

The bit designation shall be as follows:

BIT	DESIGNATION
0	NOT USED
1	LOGIC 1 = VSWR ANT A FAIL (VSWR)
2	LOGIC 1 = VSWR ANT B FAIL (VSWR)
3	LOGIC 1 = LOW PA OVERTEMPERATURE (LPAO)
4-5	POWER OUTPUT ANT B PERFORMANCE (POANTB)

BITS 5 • 4

0 • 0 PERFORMANCE NOT DEGRADED
0 • 1 POWER OUTPUT < 3dB DOWN
1 • 0 NOT USED
1 • 1 NOT USED

6-7	POWER OUTPUT ANT A PERFORMANCE (POANTA)

BITS 7 • 6

0 • 0 PERFORMANCE NOT DEGRADED
0 • 1 POWER OUTPUT < 3dB DOWN
1 • 0 NOT USED
1 • 1 NOT USED

8-15	SPARE

NOTE: IF HPA PRESENT BIT (SEE INITIALIZATION BLOCK 1, WORD 3, BIT 7), IS SET TO "HPA PRESENT", THEN THIS WORD INDICATES HPA DEGRADED PERFORMANCE. IF HPA PRESENT BIT IS NOT SET, THEN IT INDICATES R/T DEGRADED PERFORMANCE.

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

STATUS BLOCK 8

40.5.8.16 IPF Fail Summary Word R/T-HPA. (Block 8, Word 18)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 18									TSDIPF			U	REF	PWF	FSF	PLF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = IPF POWER LIMIT FAILURE (PLF)
1	LOGIC 1 = IPF FREQUENCY SPECTRUM FAILURE (FSF)
2	LOGIC 1 = IPF PULSE WIDTH FAILURE (PWF)
3	LOGIC 1 = IPF RADIATED ENERGY FAILURE (REF)
4	LOGIC 1 = IPF UTILIZATION FAILURE (U)
5-6	SPARE
7	LOGIC 1 = TRANSMISSION SHUTDOWN DUE TO IPF FAILURE (TSDIPF) [HARDWARE IPF, HPA OR R/T, OR TRANSMIT DUTY FACTOR LIMIT EXCEEDED]
8-15	SPARE

40.5.8.17 Start-Up/Interrupt Word. (Block 8, Word 19)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 19	START-UP/INTERRUPT															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	$AAAA_{16}$ = OPERATIONAL MODE OR TRANSITION FROM RECOVERABLE POWER INTERRUPT RANDOM BITS = COLD START UP

40.5.8.18 NICP/SICP Degraded Operation Word. (Block 8, Word 20)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 20	SQNS	DVZS	OVS	NOBS	TOS	NICEXC					SICEXC	SQNN	DVZN	OVN	NOBN	TON

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = NICP TIME OVERLOAD (TON)
1	LOGIC 1 = NO NICP INTERNAL BUFFERS (NOBN)
2	LOGIC 1 = NICP FLOATING POINT OVERFLOW (OVN)
3	LOGIC 1 = NICP DIVIDE BY ZERO (DVZN)
4	LOGIC 1 = NICP NEGATIVE SQUARE ROOT (SQNN)
5	LOGIC 1 = NICP CPU EXCEPTION (NCEXC) (THIS BIT IS NOT USED FOR NAVY SHIPBOARD AND NAVY AIRBORNE)
6-9	NOT USED
10	LOGIC 1 = SICP CPU EXCEPTION (SICEXC) (THIS BIT IS NOT USED FOR NAVY SHIPBOARD AND NAVY AIRBORNE)
11	LOGIC 1 = SICP TIME OVERLOAD (TOS)
12	LOGIC 1 = NO SICP INTERNAL BUFFERS (NOBS)
13	LOGIC 1 = SICP FLOATING POINT OVERFLOW (OVS)
14	LOGIC 1 = SICP DIVIDE BY ZERO (DVZS)
15	LOGIC 1 = SICP NEGATIVE SQUARE ROOT (SQNS)

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

40.5.8.19 Terminal Fail HPAG Word 11. (Block 8, Word 21) NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	MSB															LSB
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 21	HISS	HISL	HPAS		TRTT		PAOTF	TSDIPF	POANTA	POANTB		IFFF	OOBFF	1030MF	PWF	

The bit designation shall be as follows:

BIT	DESIGNATION
0	SPARE
1	LOGIC 1 = PULSE WIDTH FAIL (PWF)
2	LOGIC 1 = 1030/1090 MONITOR FAIL (1030MF)
3	LOGIC 1 = OUT-OF-BOUNDS FREQUENCY FAIL (OOBFF)
4	LOGIC 1 = IFF FREQUENCY COUNTER FAIL (IFFF)
5	SPARE
6	LOGIC 1 = Po ANT B > +1 dB or < -3 dB (POANTB)
7	LOGIC 1 = Po ANT A > +1 dB or < -3 dB (POANTA)
8	LOGIC 1 = TRANSMISSION SHUTDOWN DUE TO IPF FAIL (TSDIPF)
9	LOGIC 1 = PA OVER HIGH THRESHOLD TEMPERATURE (PAOTF)
10	SPARE
11	LOGIC 1 = TEST RTT LOOPBACK FAILURE (TRTT)
12	SPARE
13	LOGIC 1 = HPA SRA FAIL (HPAS)
14	LOGIC 1 = LONG TERM HISTOGRAM FAIL (HISL)
15	LOGIC 1 = SHORT TERM HISTOGRAM FAIL (HISS)

FOR E-3:
For the E-3 unique Ongoing Status Word 1, see Appendix X.

STATUS BLOCK 8

40.5.9 Greenwich Mean Time. (Block 9)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	GMT WORD 1															
wd 4	GMT WORD 2															
wd 5	NOT USED															
wd 6	NOT USED															
wd 7	NOT USED															
wd 8	NOT USED															
wd 9	NOT USED															
wd 10	NOT USED															
wd 11	NOT USED															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 9

40.5.9.1 GMT Word 1. (Block 9, Word 3)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	OVI		OS	MSB			SEC		LSB	MSB			SLOT			LSB

The bit designation shall be as follows:

BIT	DESIGNATION
0-6	CHRONOMETER SLOTS (SLOT) 0 - 127
7-12	CHRONOMETER SECONDS (SEC) 0 - 59 NUMBER OF SECONDS 60 - 63 SPARE
13	OSCILLATOR SELECT (OSI) LOGIC 1 = 10 Mhz OSC FROM REFERENCE TIME BASE (RTB) SELECTED LOGIC 0 = 16 Khz OSC FROM CHRONOMETER SELECTED
14	NOT USED
15	OVERFLOW INDICATOR (OVI) - THIS INDICATOR IS SET AFTER THE 32nd DAY. LOGIC 1 = OVERFLOW

NOTE: GMT WORD 1 AND WORD 2 CONTAIN THE JTIDS TIME OF DAY.

40.5.9.2 GMT Word 2. (Block 9, Word 4)

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 4	DAY					HR					MIN					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	CHRONOMETER MINUTES (MIN) NUMBER OF MINUTES (0-59)
6-10	CHRONOMETER HOURS (HR) NUMBER OF HOURS (0-23)
11-15	CHRONOMETER DAYS (DAY) NUMBER OF DAYS (0-31)

40.5.10 NPG Mapping Status. (Blocks 10 and 11)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NPG MAPPING STATUS WORD 1															
wd 4	NPG MAPPING STATUS WORD 2															
wd 5	NPG MAPPING STATUS WORD 3															
wd 6	NPG MAPPING STATUS WORD 4															
wd 7	NPG MAPPING STATUS WORD 5															
wd 8	NPG MAPPING STATUS WORD 6															
wd 9	NPG MAPPING STATUS WORD 7															
wd 10	NPG MAPPING STATUS WORD 8															
wd 11	NPG MAPPING STATUS WORD 9															
wd 12	NPG MAPPING STATUS WORD 10															
wd 13	NPG MAPPING STATUS WORD 11															
wd 14	NPG MAPPING STATUS WORD 12															
wd 15	NPG MAPPING STATUS WORD 13															
wd 16	NPG MAPPING STATUS WORD 14															
wd 17	NPG MAPPING STATUS WORD 15															
wd 18	NPG MAPPING STATUS WORD 16															
wd 19	NPG MAPPING STATUS WORD 17															
wd 20	NPG MAPPING STATUS WORD 18															
wd 21	NPG MAPPING STATUS WORD 19															
wd 22	NPG MAPPING STATUS WORD 20															
wd 23	NPG MAPPING STATUS WORD 21															
wd 24	NPG MAPPING STATUS WORD 22															
wd 25	NPG MAPPING STATUS WORD 23															
wd 26	NPG MAPPING STATUS WORD 24															
wd 27	NPG MAPPING STATUS WORD 25															
wd 28	NPG MAPPING STATUS WORD 26															
wd 29	NPG MAPPING STATUS WORD 27															
wd 30	NPG MAPPING STATUS WORD 28															
wd 31	NPG MAPPING STATUS WORD 29															
wd 32	NPG MAPPING STATUS WORD 30															

STATUS BLOCK 10-11

40.5.10 NPG Mapping Status. (Blocks 10 and 11) (continued).

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NPG MAPPING STATUS WORD 31															
wd 4	NPG MAPPING STATUS WORD 32															
wd 5	NOT USED															
wd 6	NOT USED															
wd 7	NOT USED															
wd 8	NOT USED															
wd 9	NOT USED															
wd 10	NOT USED															
wd 11	NOT USED															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 10-11

40.5.10.1 NPG Mapping Status Words. (Block 10, Words 3-32 and Block 11, Words 3,4)

MSB LSB

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
A / I		EXTERNAL NPG NUMBER									NUMBER ASSIGNS				

The bit designation shall be as follows:

BIT	DESIGNATION
0-4	NUMBER OF TRANSMIT ASSIGNMENTS IN SLOT ASSIGNMENT TABLE CORRESPONDING TO GIVEN NPG (NUMBER ASSIGNS). RANGE: 0 - 31.
5-13	EXTERNAL NPG NUMBER RANGE: 1-511.
14	NOT USED BY NAVY
15	ACTIVE/INACTIVE ENTRY INDICATION (A/I) LOGIC 1 = ACTIVE ENTRY LOGIC 0 = INACTIVE ENTRY

NOTE: THE INTERNAL NPG #(0-31) IS DEFINED IMPLICITLY IN THESE WORDS AS FOLLOWS:

-WORD X OF STATUS BLOCK 10 CORRESPONDS TO INTERNAL NPG #(X-3)

-WORD X OF STATUS BLOCK 11 CORRESPONDS TO INTERNAL NPG #(X+27)

THE "INTERNAL" NPG NUMBER IS THE RESULT OF THE NICP's MAPPING OF (AT MOST 32) EXTERNAL NPG NUMBERS INTO THE NUMBERS 0 - 31.

THE TERMINAL RESERVES WORD 3 OF BLOCK 10 AND WORDS 3&4 OF BLOCK 11 TO REPORT THE STATUS OF THE EXTERNAL NPGs 1, 30, AND 31, RESPECTIVELY. THERE ARE NO SUCH RESTRICTIONS ON WORDS 4-32 IN BLOCK 10.

40.5.11 Block 12. Not used.

40.5.12 Block 13. Not used.

40.5.13 TACAN Status (Block 14). NAVY AIRBORNE AND F-15 ONLY.

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	TACAN RANGE															
wd 4	TACAN BEARING															
wd 5	TACAN MODE/CHANNEL															
wd 6	TACAN FUNCTION STATUS															
wd 7	TACAN BEARING (BAM)															
wd 8	TACAN ODOMETER UNITS															
wd 9	TACAN ODOMETER TENS															
wd 10	TACAN ODOMETER HUNDREDS															
wd 11	TACAN BEARING SIN (θ + 60 DEGREES)															
wd 12	TACAN BEARING SIN (θ - 60 DEGREES)															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	TACAN RANGE RATE															
wd 16	TACAN BEARING RATE															
wd 17	TACAN BIT SUMMARY WORD															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 14

40.5.13.1 TACAN Range (Binary) Word. (Block 14, Word 3)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	RANGE (BINARY)															RIV

The bit designation shall be as follows:

BIT	DESIGNATION
0	RANGE WORD INVALID BIT (RIV) LOGIC 1 = RANGE WORD INVALID
1-15	TACAN RANGE LSB: 0.0125 NM MSB: 204.8 NM

40.5.13.2 TACAN Bearing (Binary) Word. (Block 14, Word 4)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 4	BEARING (BINARY)														ANT	BIV

The bit designation shall be as follows:

BIT	DESIGNATION
0	BEARING WORD INVALID BIT (BIV) LOGIC 1 = BEARING WORD INVALID
1	TACAN ANTENNA SELECT (ANT) LOGIC 1 = ANTENNA A LOGIC 0 = ANTENNA B
2-15	TACAN BEARING LSB: 0.03125 degrees MSB: 256 degrees RANGE: 0 TO 359.96875 degrees

40.5.13.3 TACAN Mode/Channel Word. (Block 14, Word 5)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 5	RV	BV	MODE				CHANNEL									MCIV
			A/A	REC	T/R	X/Y	TENS - HUN				UNITS					
							80	40	20	10	8	4	2	1		

The bit designation shall be as follows:

BIT	DESIGNATION
0	MODE/CHANNEL WORD INVALID BIT (MCIV) LOGIC 1 = MODE/CHANNEL WORD INVALID
1	NOT USED
2-9	TACAN CHANNEL NUMBER 0 = NO STATEMENT 1-126 = ASSIGNED CHANNEL
10	X/Y MODE (X/Y) LOGIC 1 = Y MODE LOGIC 0 = X MODE
11-12	TRANSMIT/RECEIVE MODE

BIT 12 • 11	
0 • 0	NOT USED
0 • 1	TRANSMIT/RECEIVE (T/R) MODE
1 • 0	RECEIVE MODE
1 • 1	NOT USED

13	A/A MODE (A/A) LOGIC 1 = AIR-TO-AIR MODE
14	BEARING VALID (BV) LOGIC 1 = BEARING VALID (SEE WORD 4, BIT 0)
15	RANGE VALID (RV) LOGIC 1 =RANGE VALID (SEE WORD 3, BIT 0)

40.5.13.4 TACAN Function Status Word. (Block 14, Word 6)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 6			AGC								DME		BEARING			
			S/T	(BINARY)							S/T	MEM	S/T	15	135	MEM

The bit designation shall be as follows:

BIT	DESIGNATION
0	BEARING IN MEMORY (MEM) LOGIC 1 = BEARING IN MEMORY
1	LOGIC 1 = BEARING 135 Hz MOD PRESENT
2	LOGIC 1 = BEARING 15 Hz MOD PRESENT
3	BEARING SEARCH/TRACK (S/T) LOGIC 1 = BEARING IN SEARCH LOGIC 0 = BEARING IN TRACK
4	DME IN MEMORY (MEM) LOGIC 1 = DME IN MEMORY
5	DME SEARCH/TRACK (S/T) LOGIC 1 = DME IN SEARCH LOGIC 0 = DME IN TRACK
6-12	AGC (BINARY) LSB: 10 V/128
13	AGC SEARCH/TRACK LOGIC 1 = AGC IN SEARCH LOGIC 0 = AGC IN TRACK
14-15	NOT USED

40.5.13.5 TACAN Bearing (BAM) Word. (Block 14, Word 7)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 7	BEARING (BAM)														ANT	BIV

The bit designation shall be as follows:

BIT	DESIGNATION
0	BEARING WORD INVALID BIT (BIV) LOGIC 1 = BEARING WORD INVALID
1	TACAN ANTENNA SELECT (ANT) LOGIC 1 = ANTENNA A LOGIC 0 = ANTENNA B
2	NOT USED
3-15	TACAN BEARING IN BAM (SEE TABLE IV-III) LSB: $\pi \times 2^{(-12)}$ radians MSB: $-\pi$ radians

40.5.13.6 TACAN Odometer Units Word. (Block 14, Word 8)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 8	SIN (θ + 60 degrees)								SIN (θ - 60 degrees)							

The bit designation shall be as follows:

BIT	DESIGNATION
0-7	ODOMETER UNITS-GENEVA SIN (θ - 60) IN TWO'S COMPLEMENT LSB: 1/128 MSB: -1
8-15	ODOMETER UNITS-GENEVA SIN (θ + 60) IN TWO'S COMPLEMENT LSB: 1/128 MSB: -1

40.5.13.7 TACAN Odometer Tens Word. (Block 14, Word 9)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 9	SIN (θ + 60 degrees)								SIN (θ - 60 degrees)							

The bit designation shall be as follows:

BIT	DESIGNATION
0-7	ODOMETER TENS-GENEVA SIN (θ - 60) IN TWO'S COMPLEMENT LSB: 1/128 MSB: -1
8-15	ODOMETER TENS-GENEVA SIN (θ + 60) IN TWO'S COMPLEMENT LSB: 1/128 MSB: -1

40.5.13.8 TACAN Odometer Hundreds Word. (Block 14, Word 10)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 10	SIN (θ + 60 degrees)								SIN (θ - 60 degrees)							

The bit designation shall be as follows:

BIT	DESIGNATION
0-7	ODOMETER HUNDREDS-GENEVA SIN (θ - 60) IN TWO'S COMPLEMENT LSB: 1/128 MSB: -1
8-15	ODOMETER HUNDREDS-GENEVA SIN (θ + 60) IN TWO'S COMPLEMENT LSB: 1/128 MSB: -1

40.5.13.9 TACAN Bearing Sin (θ + 60 degrees) Word. (Block 14, Word 11)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 11	BEARING SIN (θ + 60 degrees)															

The bit designation shall be as follows:

BIT	DESIGNATION
0-2	NOT USED
3-15	BEARING SIN (θ + 60 degrees) IN TWO'S COMPLEMENT LSB: 1/4096 MSB: -1

40.5.13.10 TACAN Bearing Sin (θ - 60 degrees) Word. (Block 14, Word 12)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 12	BEARING SIN (θ - 60 degrees)															

The bit designation shall be as follows:

BIT	DESIGNATION
0-2	NOT USED
3-15	BEARING SIN (θ - 60 degrees) IN TWO'S COMPLEMENT LSB: 1/4096 MSB: -1

40.5.13.11 TACAN Spare Word. (Block 14, Word 13)

40.5.13.12 TACAN Spare Word. (Block 14, Word 14)

40.5.13.13 TACAN Range Rate Word. (Block 14, Word 15)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 15	MSB	0	RANGE RATE												LSB	RR IV

The bit designation shall be as follows:

BIT	DESIGNATION
0	RANGE RATE WORD INVALID (RRIV) LOGIC 1 = RANGE RATE WORD INVALID
1-13	13 BITS OF 14-BIT RANGE RATE WORD. IN TWO'S COMPLEMENT. MSB IS LOCATED IN BIT 15. LSB: 1 KNOT RANGE: - 8192 TO + 8191 KNOTS
14	SET TO LOGIC 0
15	MSB OF RANGE RATE (MSB). ONLY LSB'S ARE IN BITS 1-13 OF THIS WORD.

40.5.13.14 TACAN Bearing Rate Word. (Block 14, Word 16)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 16	MSB	0	BEARING RATE												LSB	BRIV

The bit designation shall be as follows:

BIT	DESIGNATION
0	BEARING RATE WORD INVALID (BRIV) - LOGIC 1 = BEARING RATE WORD INVALID
1-13	13 BITS OF 14-BIT BEARING RATE WORD. IN TWO'S COMPLEMENT. MSB IS LOCATED IN BIT 15. LSB: 0.01 degrees/second RANGE: - 81.92 TO + 81.91 degrees/second
14	SET TO LOGIC 0
15	MSB OF BEARING RATE LSB'S ARE IN BIT 1-13 OF THIS WORD.

STATUS BLOCK 14

40.5.13.15 TACAN BIT Summary Word. (Block 14, Word 17)

NAVY AIRBORNE AND F-15 ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 17	PWR UP F	AGC F	REC SENS F	PWR AMP F	SYNTH F	RAM F	ROM F	CPU F							FAIL IND	STIND

The bit designation shall be as follows:

BIT	DESIGNATION
0	SELF TEST INDICATOR (STIND) LOGIC 1 = SELF TEST LOGIC 0 = NORMAL OPERATION
1	FAILURE INDICATOR (FAIL IND) LOGIC 1 = TEST FAILURE LOGIC 0 = GOOD RADIO
2-7	NOT USED
8	LOGIC 1 = CPU FAILURE (CPUF)
9	LOGIC 1 = ROM FAILURE (ROMF)
10	LOGIC 1 = RAM FAILURE (RAMF)
11	LOGIC 1 = SYNTHESIZER FAILURE LOSS OF LOCK (SYNTHF)
12	LOGIC 1 = POWER LEVEL (ENHANCED TACAN) FAILURE (PWR AMP F)
13	LOGIC 1 = RECEIVER SENSITIVITY FAILURE (REC SENSF)
14	LOGIC 1 = AGC FUNCTION FAILURE (AGCF)
15	LOGIC 1 = POWER-UP SELF TEST FAILURE (PWR UP F)

40.5.13.16 TACAN Spare Word. (Block 14, Word 18)

40.5.14 SACP Filter Request. (Block 15)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	TADIL J SACP MESSAGE FILTER WORD 1															
wd 4	TADIL J SACP MESSAGE FILTER WORD 2															
wd 5	TADIL J SACP MESSAGE FILTER WORD 3															
wd 6	TADIL J SACP MESSAGE FILTER WORD 4															
wd 7	TADIL J SACP MESSAGE FILTER WORD 5															
wd 8	TADIL J SACP MESSAGE FILTER WORD 6															
wd 9	TADIL J SACP MESSAGE FILTER WORD 7															
wd 10	TADIL J SACP MESSAGE FILTER WORD 8															
wd 11	TADIL J SACP MESSAGE FILTER WORD 9															
wd 12	TADIL J SACP MESSAGE FILTER WORD 10															
wd 13	TADIL J SACP MESSAGE FILTER WORD 11															
wd 14	TADIL J SACP MESSAGE FILTER WORD 12															
wd 15	TADIL J SACP MESSAGE FILTER WORD 13															
wd 16	TADIL J SACP MESSAGE FILTER WORD 14															
wd 17	TADIL J SACP MESSAGE FILTER WORD 15															
wd 18	TADIL J SACP MESSAGE FILTER WORD 16															
wd 19	TADIL J SACP PPLI LOOPBACK MSG FILTER WORD															
wd 20	IJMS SACP MESSAGE FILTER WORD 1															
wd 21	IJMS SACP MESSAGE FILTER WORD 2															
wd 22	IJMS SACP MESSAGE FILTER WORD 3															
wd 23	IJMS SACP MESSAGE FILTER WORD 4															
wd 24	IJMS SACP MESSAGE FILTER WORD 5															
wd 25	IJMS SACP MESSAGE FILTER WORD 6															
wd 26	IJMS SACP MESSAGE FILTER WORD 7															
wd 27	IJMS SACP MESSAGE FILTER WORD 8															
wd 28	TADIL J SACP PPLI MESSAGE FILTER STN WORD															
wd 29	IJMS SACP MESSAGE FILTER WORD 9															
wd 30	IJMS SACP MESSAGE FILTER WORD 10															
wd 31	IJMS SACP P LOOPBACK MESSAGE FILTER WORD															
wd 32	NOT USED															

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	J1.7	J1.6	J1.5	J1.4	J1.3	J1.2	J1.1	J1.0	J0.7	J0.6	J0.5	J0.4	J0.3	J0.2	J0.1	J0.0
wd 2	J3.7	J3.6	J3.5	J3.4	J3.3	J3.2	J3.1	J3.0	J2.7	J2.6	J2.5	J2.4	J2.3	J2.2	J2.1	J2.0
wd 3	J5.7	J5.6	J5.5	J5.4	J5.3	J5.2	J5.1	J5.0	J4.7	J4.6	J4.5	J4.4	J4.3	J4.2	J4.1	J4.0
wd 4	J7.7	J7.6	J7.5	J7.4	J7.3	J7.2	J7.1	J7.0	J6.7	J6.6	J6.5	J6.4	J6.3	J6.2	J6.1	J6.0
wd 5	J9.7	J9.6	J9.5	J9.4	J9.3	J9.2	J9.1	J9.0	J8.7	J8.6	J8.5	J8.4	J8.3	J8.2	J8.1	J8.0
wd 6	J11.7	J11.6	J11.5	J11.4	J11.3	J11.2	J11.1	J11.0	J10.7	J10.6	J10.5	J10.4	J10.3	J10.2	J10.1	J10.0
wd 7	J13.7	J13.6	J13.5	J13.4	J13.3	J13.2	J13.1	J13.0	J12.7	J12.6	J12.5	J12.4	J12.3	J12.2	J12.1	J12.0
wd 8	J15.7	J15.6	J15.5	J15.4	J15.3	J15.2	J15.1	J15.0	J14.7	J14.6	J14.5	J14.4	J14.3	J14.2	J14.1	J14.0
wd 9	J17.7	J17.6	J17.5	J17.4	J17.3	J17.2	J17.1	J17.0	J16.7	J16.6	J16.5	J16.4	J16.3	J16.2	J16.1	J16.0
wd 10	J19.7	J19.6	J19.5	J19.4	J19.3	J19.2	J19.1	J19.0	J18.7	J18.6	J18.5	J18.4	J18.3	J18.2	J18.1	J18.0
wd 11	J21.7	J21.6	J21.5	J21.4	J21.3	J21.2	J21.1	J21.0	J20.7	J20.6	J20.5	J20.4	J20.3	J20.2	J20.1	J20.0
wd 12	J23.7	J23.6	J23.5	J23.4	J23.3	J23.2	J23.1	J23.0	J22.7	J22.6	J22.5	J22.4	J22.3	J22.2	J22.1	J22.0
wd 13	J25.7	J25.6	J25.5	J25.4	J25.3	J25.2	J25.1	J25.0	J24.7	J24.6	J24.5	J24.4	J24.3	J24.2	J24.1	J24.0
wd 14	J27.7	J27.6	J27.5	J27.4	J27.3	J27.2	J27.1	J27.0	J26.7	J26.6	J26.5	J26.4	J26.3	J26.2	J26.1	J26.0
wd 15	J29.7	J29.6	J29.5	J29.4	J29.3	J29.2	J29.1	J29.0	J28.7	J28.6	J28.5	J28.4	J28.3	J28.2	J28.1	J28.0
wd 16	J31.7	J31.6	J31.5	J31.4	J31.3	J31.2	J31.1	J31.0	J30.7	J30.6	J30.5	J30.4	J30.3	J30.2	J30.1	J30.0

LOGIC 0 = PROVIDE MESSAGE
LOGIC 1 = DO NOT PROVIDE MESSAGE

STATUS BLOCK 15

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of the Host Message Filter Words, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of the Host Message Filter Words, see Appendix VIII.

40.5.14.2 TADIL J SACP PPLI Loopback Message Filter Word. (Block 15, Word 19)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0 LSB
wd 19													PPLI			

The bit designation shall be as follows:

BIT	DESIGNATION
0-2	NOT USED
3	LOGIC 0 = PROVIDE ALL PPLI LOOPBACK MESSAGES
4-15	NOT USED

	SUBCATEGORY AND LABEL																CATEGORY	CODE
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
wd 1	7-1						4-1		3-1		2-1						N	0
wd 2	2-11	2-10	1-11		4-3		2-5	2-4	2-3	2-2	2-1		1-1				C	1
wd 3	7-1		6-1									1-2	1-1				I	2
wd 4								3-2	3-1	2-2	2-1		1-1				S	3
wd 5																	B	4
wd 6									3-1								M	5
wd 7																	A	6
wd 8																		7
wd 9																		8
wd 10																		9
wd 11																		10
wd 12																		11
wd 13		7		6		5		4		3		2		1		0	U	12
wd 14													1-1				V	13
wd 15								4		3				1			T	14
wd 16						5				3		2		1			P	15

LOGIC 1 = PROVIDE MESSAGES
LOGIC 0 = DO NOT PROVIDE MESSAGE

STATUS BLOCK 15

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of Block 15, Words 20-27,29-30, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of Block 15, Words 20-27,29-30, see Appendix VIII.

40.5.14.4 TADIL J SACP PPLI Message Filter STN Word. (Block 15, Word 28)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 28	SSM	PPLI MESSAGE FILTER STN														

The bit designation shall be as follows:

BIT	DESIGNATION
0-14	SACP MESSAGE FILTER SOURCE TRACK NUMBER CONSISTING OF FIVE OCTAL DIGITS (00000 TO 77777). IF THE STN EQUALS ZERO, THE PPLI FILTER CRITERIA APPLIES TO ALL STNS. IF THE STN DOES NOT EQUAL ZERO, THE PPLI FILTER CRITERIA APPLIES TO THE SPECIFIED STN
15	SCREEN FOR SACP MESSAGES (SSM) LOGIC 1 = PROVIDE MESSAGES TO SACP AS INDICATED BY SACP MESSAGE FILTERS LOGIC 0 = DO NOT PROVIDE MESSAGES TO SACP

40.5.14.5 IJMS SACP P Loopback Message Filter Word. (Block 15, Word 31)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 31													P			

The bit designation shall be as follows:

BIT	DESIGNATION
0-2	NOT USED
3	LOGIC 1 = PROVIDE ALL P LOOPBACK MESSAGES
4-15	NOT USED

FOR NAVY SHIPBOARD:
For the Navy Shipboard unique values of this word, see Appendix VIII.

FOR NAVY AIRBORNE:
For the Navy Airborne unique values of this word, see Appendix VIII.

40.5.14.6 Status Block 15, Word 32. Not used.

40.5.15 NICP Status Report Number 2. (Block 16)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	REL NAV KALMAN FILTER STATUS WORD 2															
wd 4	R/T BIT WORD 1															
wd 5	R/T BIT WORD 2															
wd 6	R/T BIT WORD 3															
wd 7	R/T BIT WORD 4															
wd 8	PTP BIT WORD 1															
wd 9	PTP BIT WORD 2															
wd 10	CTP BIT WORD 1															
wd 11	CTP BIT WORD 2															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 16

40.5.15.1 Relative Navigation Kalman Filter Status Word 2. (Block 16, Word 3)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	R/S CID			R/S C	Q_h					PR	NAV			NSV	GEF	GVF

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = GRID OBSERVATION VALIDITY FAILURE(S) (GVF)
1	LOGIC 1 = GEODETIC OBSERVATION VALIDITY FAILURE(S) (GEF)
2	LOGIC 1 = NON-NAV SYNC OBSERVATION VALIDITY (NSV)
3-5	ORGANIZATIONAL USER TYPE (NAV) BIT 5 • 4 • 3 0 • 0 • 0 NOT USED 0 • 0 • 1 SECONDARY USER 0 • 1 • 0 PRIMARY USER 0 • 1 • 1 NAVIGATION CONTROLLER 1 • 0 • 0 SECONDARY NAVIGATION CONTROLLER THE OTHER VALUES ARE NOT USED
6	LOGIC 1 = POSITION REFERENCE (PR)
7	NOT USED
8-11	TRANSMITTED ALTITUDE QUALITY (Q_h) (SEE TABLE IV-V)
12	R/S CIRCUMVENT LOGIC 1 = THE R/S IDENTIFIED IN BITS 13-15 IS BEING CIRCUMVENTED LOGIC 0 = NO R/S IS BEING CIRCUMVENTED

BIT	DESIGNATION
13-15	R/S CIRCUMVENT IDENTIFIER (R/S CID)

BIT 15 • 14 • 13	
0 • 0 • 0	RECEIVER/SYNTHESIZER 1
0 • 0 • 1	RECEIVER/SYNTHESIZER 2
0 • 1 • 0	RECEIVER/SYNTHESIZER 3
0 • 1 • 1	RECEIVER/SYNTHESIZER 4
1 • 0 • 0	RECEIVER/SYNTHESIZER 5
1 • 0 • 1	RECEIVER/SYNTHESIZER 6
1 • 1 • 0	RECEIVER/SYNTHESIZER 7
1 • 1 • 1	RECEIVER/SYNTHESIZER 8

40.5.15.2 R/T BIT Word 1. (Block 16, Word 4)

The definition of this word is contained in 10.1.1.2.1.6, address location 0069_{16}.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.3 R/T BIT Word 2. (Block 16, Word 5)

The definition of this word is contained in 10.1.1.2.1.6, address location $006A_{16}$.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.4 R/T BIT Word 3. (Block 16, Word 6)

The definition of this word is contained in 10.1.1.2.1.6, address location $006B_{16}$.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.5 R/T BIT Word 4. (Block 16, Word 7)

The definition of this word is contained in 10.1.1.2.1.6, address location $006C_{16}$.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.6 PTP BIT Word 1. (Block 16, Word 8)

The definition of this word is contained in 10.1.1.2.1.7, address location $006D_{16}$.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.7 PTP BIT Word 2. (Block 16, Word 9)

The definition of this word is contained in 10.1.1.2.1.7, address location $006E_{16}$.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.8 CTP BIT Word 1. (Block 16, Word 10)

The definition of this word is contained in 10.1.1.2.1.8, address location $006F_{16}$.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.15.9 CTP BIT Word 2. (Block 16, Word 11)

The definition of this word is contained in 10.1.1.2.1.8, address location 0070_{16}.

NOTE: FOR NAVY SHIPBOARD AND NAVY AIRBORNE, THESE BITS ARE RESERVED FOR INTERNAL USE.

40.5.16 IJMS 12-SECOND Message Status Words and IJMS Processing Status Counters. (Block 17, Words 3 through 24)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NO. OF SUCCESSFUL IJMS TRANS RCVD DURING LAST REPORT INTERVAL[H]															
wd 4	NOT USED															
wd 5	NOT USED															
wd 6	NO. OF IJMS TRANSMISSIONS RECEIVED IN ERROR															
wd 7	NO. OF IJMS MESSAGES NOT ACKNOWLEDGED															
wd 8	NO. OF IJMS LOOPBACK DECODE FAILS															
wd 9	NOT USED															
wd 10	NO. OF IJMS LOOPBACK FAILURES (NO LOOPBACKS)															
wd 11	NO. OF IJMS SUCCESSFUL LOOPBACKS															
wd 12	NO. OF IJMS TEST MESSAGE BIT-BY-BIT COMPARE FAILURES															
wd 13	NO. OF SUCCESSFULLY RECEIVED IJMS TEST MESSAGES															
wd 14	I/J BUFFER FULL COUNT (SICP) RESERVED FOR SICP TEST[I]															
wd 15	J/I BUFFER FULL COUNT (SICP) RESERVED FOR SICP TEST[I]															
wd 16	NPG-I/J SELECT CONFLICT COUNT (SICP) RESERVED FOR SICP TEST[I]															
wd 17	J/I NOT TRANSLATABLE COUNT (SICP) RESERVED FOR SICP TEST[I]															
wd 18	NO. OF IJMS MSGS BUFFERED FOR MTRANS (SICP) RESERVED FOR SICP TEST[I]															
wd 19	NO. OF IJMS MSGS PROCESSED BY MTRANS (SICP) RESERVED FOR SICP TEST[I]															
wd 20	NO. OF TADIL J MSG GROUPS BUFFERED FOR MTRANS (SICP) RESERVED FOR SICP TEST[I]															
wd 21	NO. OF TADIL J MSG GROUPS PROCESSED BY MTRANS (SICP) RESERVED FOR SICP TEST[I]															
wd 22	NO. OF MSGS REJECTED FOR NPG BUSY (SICP) RESERVED FOR SICP TEST[I]															
wd 23	NO. OF I/J ABORTED TRANSLATIONS (SICP) RESERVED FOR SICP TEST[I]															
wd 24	NO. OF J/I ABORTED TRANSLATIONS (SICP) RESERVED FOR SICP TEST[I]															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

[H] DOES NOT INCLUDE RTTs [I] NOT USED OPERATIONALLY STATUS BLOCK 1

WORD 3, BITS 0-10:	NUMBER OF SUCCESSFUL IJMS TRANSMISSIONS RECEIVED DURING LAST REPORTING INTERVAL (DOES NOT INCLUDE RTT'S)
WORD 4, BITS 0-10:	NOT USED
WORD 5, BITS 0-10:	NOT USED
WORD 6, BITS 0-10:	NUMBER OF IJMS TRANSMISSIONS RECEIVED IN ERROR
WORD 7, BITS 0-10:	NUMBER OF IJMS MESSAGES NOT ACKNOWLEDGED
WORD 8, BITS 0-10:	NUMBER OF IJMS LOOPBACK DECODE FAILS
WORD 9, BITS 0-10:	NOT USED
WORD 10, BITS 0-10:	NUMBER OF IJMS LOOPBACK FAILURES (NO LOOPBACKS)
WORD 11, BITS 0-10:	NUMBER OF IJMS SUCCESSFUL LOOPBACKS
WORD 12, BITS 0-10:	NUMBER OF IJMS TEST MESSAGE BIT-BY-BIT COMPARE FAILURES
WORD 13, BITS 0-10:	NUMBER OF SUCCESSFULLY RECEIVED IJMS TEST MESSAGES
WORD 14, BITS 0-10:	I/J BUFFER FULL COUNT (SICP)
WORD 15, BITS 0-10:	J/I BUFFER FULL COUNT (SICP)
WORD 16, BITS 0-10:	NPG-I/J SELECT CONFLICT COUNT (SICP)
WORD 17, BITS 0-10:	J/I NOT TRANSLATABLE COUNT (SICP)
WORD 18, BITS 0-10:	NUMBER OF IJMS MESSAGES BUFFERED FOR MTRANS (SICP)
WORD 19, BITS 0-10:	NUMBER OF IJMS MESSAGES PROCESSED BY MTRANS (SICP)
WORD 20, BITS 0-10:	NUMBER OF TADIL J MESSAGE GROUPS BUFFERED FOR MTRANS (SICP)
WORD 21, BITS 0-10:	NUMBER OF TADIL J MESSAGE GROUPS PROCESSED BY MTRANS (SICP)
WORD 22, BITS 0-10:	NUMBER OF MESSAGES REJECTED FOR NPG BUSY (SICP)

STATUS BLOCK 17

WORD 23, BITS 0-10: NUMBER OF I/J ABORTED TRANSLATIONS (SICP)

WORD 24, BITS 0-10: NUMBER OF J/I ABORTED TRANSLATIONS (SICP)

NOTE: RANGE = 0-1536. BITS 11-15 OF EACH WORD ARE SET TO ZERO.

NOTE: BLOCK IS NOT APPLICABLE TO NAVY TERMINALS.

40.5.17 E-3 Status (Block 18).

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1																
wd 2																
wd 3																
wd 4																
wd 5																
wd 6																
wd 7	NUMBER OF RR WRAP TEST FAILS															
wd 8	NUMBER OF RR SERIAL LINE FAILS															
wd 9	NUMBER OF RR INPUT SERIAL LINE PARITY FAILS															
wd 10	NUMBER OF RR OUTPUT SERIAL LINE PARITY FAILS															
wd 11	NUMBER OF RR TAPE PARITY ERRORS															
wd 12	NUMBER OF RR INCOMPLETE OPERATIONS															
wd 13	NUMBER OF RR ILLEGAL COMMANDS															
wd 14	NUMBER OF RR UNABLE TO COMPLY															
wd 15	NUMBER OF CPS COMMAND BUFFERS WITH PARITY ERROR (NOT INTERNAL WRAP)															
wd 16	NUMBER OF PARTIAL CPS COMMAND BUFFERS (NOT INTERNAL WRAP)															
wd 17	NUMBER OF CPS COMMAND TIMEOUTS (NOT INTERNAL WRAP)															
wd 18	NUMBER OF CPS COMMAND INTERNAL WRAP FAILS															
wd 19	NUMBER OF CPS INCOMPLETE MULTI-BLOCK TRANSFERS															
wd 20	NUMBER OF CPS REPORT BUFFERS WITH PARITY ERROR (NOT INTERNAL WRAP)															
wd 21	NUMBER OF CPS REPORT TIMEOUTS (NOT INTERNAL WRAP)															
wd 22	NUMBER OF CPS REPORT INTERNAL WRAP FAILS															
wd 23	RR STATUS WORD (FROM RR)															
wd 24	RR OPERATION STATUS WORD															
wd 25	I/O DEGRADED STATUS WORD															
wd 26	I/O FAIL STATUS WORD 1															
wd 27	I/O FAIL STATUS WORD 2															
wd 28	NUMBER OF WRITE OPERATION STATUS WORDS															
wd 29	NUMBER OF CMS MUX STATUS ERRORS															
wd 30	NUMBER OF NCS MUX STATUS ERRORS															
wd 31																
wd 32																

E-3 ONLY - STATUS BLOCK 18

WORDS 3-6

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wds 3, 4, 5, 6	SPARE															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	SPARE

WORDS 7-22

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wds 7-22	STATUS COUNTS OF INDICATED EVENTS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	STATUS COUNTS OF INDICATED EVENTS RANGE: 0 - 65535

WORD 23

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 23	RR STATUS WORD															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	RR STATUS WORD 16 LSB OF RR STATUS WORD (SEE FIGURE X-VIII) LATEST COPY OF EITHER 1E1B2 OR 1E1B3 (SEE 100.1.1.6.2.4.2).

E-3 ONLY - STATUS BLOCK 18

WORD 24 RR OPERATION STATUS WORDH

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 24			NWE	OFFL	EOT	NRDY	RDY	RPAU	RON	HOK	HF	RNG		PNG	HNV	HA

The bit designation shall be as follows:

BIT	DESIGNATION
0	RR DID NOT WRITE HEADER BECAUSE OF SERIAL LINE PARITY FAIL OR RR NOT READY OR NOT BEGINNING OF TAPE (HA-HEADER ABORT) (RECORDING CANNOT BE STARTED).
1	HEADER DATA NOT VALID (HNV) AND COMMAND IS WRITE HEADER.
2	RR NOT STARTED AND COMMAND IS PAUSE (PNG-PAUSE NO GOOD)
3	NOT USED
4	RR NOT PAUSED AND COMMAND IS PAUSE OFF (RNG-RESUME RECORDING NO GOOD)
5	RR ERROR ON WRITING HEADER (HF-HEADER FAIL)
6	HEADER WRITTEN WITHOUT ERROR (INDICATION HELD FOR 1 SECOND) (HOK-HEADER OK)
7	RECORDING ON (RON)
8	RECORDING PAUSED (RPAU)
9	RR READY TO WRITE HEADER (RDY)
10	RR NOT READY TO WRITE HEADER (NRDY)
11	RR AT END OF TAPE (EOT)
12	RR OFF LINE (OFFL)
13	RR NOT WRITE ENABLED (NWE)
14-15	NOT USED

H ONLY ONE BIT SET AT ANY TIME IN BITS 0-5 AND BITS IN 6-13. SET TO ZERO IF RECORDING PORT IS TSRD.

E-3 ONLY - STATUS BLOCK 18

WORD 23 I/O DEGRADED

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 25					RRMO	NCSSE	CMSSE	NCSSB	CMSSB	CPSMBF	RRNG	RRUTC	RRILL	RRINC	RRTPE	

The bit designation shall be as follows:

BIT	DESIGNATION
0	SPARE
1	RR TAPE PARITY ERROR (RRTPE)
2	RR INCOMPLETE OPERATION (RRINC)
3	RR ILLEGAL COMMAND (RRILL)
4	RR UNABLE TO COMPLY (RRUTC)
5	RR ERROR ON WRITING HEADER (RRNG-RR NO GOOD) COPY OF BIT 0 WORD 24.
6	CPS MULTI-BLOCK TRANSFER FAIL (CPSMBF)
7	CMS MUX - SWITCH BUS DUE TO ERROR (CMSSB)
8	NCS MUX - SWITCH BUS DUE TO ERROR (NCSSB)
9	CMS MUX - STATUS ERROR
10	NCS MUX - STATUS ERROR
11	RR MOTION (RRMO)
12-15	NOT USED

E-3 ONLY - STATUS BLOCK 18

WORD 26 I/O FAIL STATUS WORD 1

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 26	NCSCTF	CMSCTF	RDAF	RNOTE	RROM	RRAM	ROPE	RIPE	RLF	RWF						

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	SPARE
6	RR WRAPAROUND FAIL (RWF)
7	RR SERIAL LINE FAIL (RLF)
8	RR INPUT PARITY ERROR (RIPE)
9	RR OUTPUT PARITY ERROR (ROPE)
10	RR RAM FAIL (& SERIAL LINE CONTROLLER ROM) FAIL (RRAM)
11	RR ROM CHECKSUM FAIL (RROM)
12	RR RECORDING INPUT BUFFERS NOT EMPTIED (RNOTE)
13	RR FAILURE TO CLEAR DA IN COMMAND WORD (RDAF)
14	CMS MUX - FAILURE TO COMPLETE COMMAND TABLE DURING BUS CONTROL MODE (CMSCTF)
15	NCS MUX - FAILURE (NCSCTF)

E-3 ONLY - STATUS BLOCK 18

WORD 27 I/O FAIL STATUS WORD 2

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 27	CMSNDO	CMSNDR		NCSNDR	CPSRND	CPSRD	CPSRRF	CPSRTO	CPSIWF	CPSRPE	CPSCND	CPSCD	CPSCRF	CPSCTO	CPSCPB	CPSCPE

The bit designation shall be as follows:

BIT	DESIGNATION
0	CPS COMMAND PORT PARITY ERROR (NOT INTERNAL WRAP) (CPSCPE)
1	CPS COMMAND PORT PARTIAL BUFFER (NOT INTERNAL WRAP) (CPSCPB)
2	CPS COMMAND PORT TIMEOUT (NOT INTERNAL WRAP) (CPSCTO)
3	CPS COMMAND PORT ROM CHECKSUM FAIL (CPSCRF)
4	CPS COMMAND PORT DID NOT USE BIT/STATUS WORD (CPSCD -CPS COMMAND PORT DEAD).
5	CPS COMMAND PORT NO DATA RECEIVED FOR 12 SECONDS (CPSCND)
6	CPS REPORT PORT PARITY ERROR (NOT INTERNAL WRAP) (CPSRPE)
7	CPS INTERNAL WRAP FAIL (COMMAND OR REPORT) (CPSIWF)
8	CPS REPORT PORT TIMEOUT (NOT INTERNAL WRAP) (CPSRTO)
9	CPS REPORT PORT ROM CHECKSUM FAIL (CPSRRF)
10	CPS REPORT PORT DID NOT USE BIT (STATUS WORD (CPSRD - CPS REPORT PORT DEAD)
11	CPS REPORT PORT NO DATA OUTPUT FOR 12 SECONDS (CPSRND)

E-3 ONLY - STATUS BLOCK 18

BIT	DESIGNATION
12	NCS NO DATA RECEIVED FOR 1 SECOND (NCSNDR)
13	NOT USED
14	CMS NO DATA RECEIVED FOR 1 SECOND (CMSNDR)
15	CMS NO DATA OUTPUT FOR 1 SECOND (CMSNDO)

WORDS 28-30

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0 LSB
wds 28-30	STATUS COUNTS OF INDICATED EVENTS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	STATUS COUNTS OF INDICATED EVENTS RANGE: 0 - 65535

40.5.18 E-3 Status (Block 19).

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1																
wd 2																
wd 3	NUMBER OF CCP A BUFFERS NOT EMPTIED															
wd 4	NUMBER OF CCP A RESULTS RECEIVED TWO SLOTS LATE															
wd 5	NUMBER OF CCP A RESULTS NOT RECEIVED															
wd 6	NUMBER OF CCP A TEST CONVERSION FAILS															
wd 7	NUMBER OF CCP B BUFFERS NOT EMPTIED															
wd 8	NUMBER OF CCP B RESULTS RECEIVED TWO SLOTS LATE															
wd 9	NUMBER OF CCP B RESULTS NOT RECEIVED															
wd 10	NUMBER OF CCP B TEST CONVERSION FAILS															
wd 11	CCP A/B DEGRADED STATUS WORD															
wd 12	CCP A/B FAIL STATUS WORD															
wd 13	CCP A/B INITIALIZATION STATUS WORD															
wd 14	METERED NPG A STATUS WORD															
wd 15	METERED NPG B STATUS WORD															
wd 16	METERED NPG C STATUS WORD															
wd 17	METERED NPG D STATUS WORD															
wd 18	METERED NPG E STATUS WORD															
wd 19	METERED NPG F STATUS WORD															
wd 20	METERED NPG G STATUS WORD															
wd 21	SPARE															
wd 22	SPARE															
wd 23	SPARE															
wd 24	SPARE															
wd 25	SPARE															
wd 26	SPARE															
wd 27	SPARE															
wd 28	SPARE															
wd 29	SPARE															
wd 30	SPARE															
wd 31	SPARE															
wd 32	SPARE															

E-3 ONLY - STATUS BLOCK 19

WORDS 3-10

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wds 3-10	STATUS COUNTS OF INDICATED EVENTS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	STATUS COUNTS OF INDICATED EVENTS RANGE: 0 - 65535

WORD 11 CCP A/B DEGRADED STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 11															CCBLATE	CCALATE

The bit designation shall be as follows:

BIT	DESIGNATION
0	CCP A OUTPUT RECEIVED TWO SLOTS LATE (CCALATE)
1	CCP B OUTPUT RECEIVED TWO SLOTS LATE (CCBLATE)
2-15	SPARE

WORD 12 CCP A/B FAIL STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 12					CBIF	CBTCF	CBWF	CBNEV	CBNOTE	CBVF	CAIF	CATCF	CAWF	CANEV	CANOTE	CAVF

The bit designation shall be as follows:

BIT	DESIGNATION
0	CCP A VERIFY FAIL (CAVF)
1	CCP A INPUT BUFFER NOT EMPTIED (CANOTE)
2	CCP A OUTPUT NOT RECEIVED (CANEV-CCP A NEVER)
3	CCP A WRAPAROUND FAIL (CAWF)
4	CCP A TET CONVERSION FAIL (CATCF)
5	CCP A INITIALIZATION FAILURE (CAIF)
6	CCP B VERIFY FAIL (CBVF)
7	CCP B INPUT BUFFER NOT EMPTIED (CBNOTE)
8	CCP B OUTPUT NOT RECEIVED (CBNEV-CCP B NEVER)
9	CCP B WRAPAROUND FAIL (CBWF)
10	CCP B TEST CONVERSION FAIL (CBTCF)
11	CCP B INITIALIZATION FAILURE (CBIF)
12-15	SPARE

E-3 ONLY - STATUS BLOCK 19

WORD 13 CCP A/B INITIALIZATION STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 13															CCPBIR	CCPAIR

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = CCP A INITIALIZATION REQUIRED
1	LOGIC 1 = CCP B INITIALIZATION REQUIRED
2-15	SPARE

WORD 14 METERED NPG A STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 14	METERED NPG A STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG A STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 42 = BUFFER SPACE FOR 42 MORE MESSAGES 43 = METERED NPG EMPTY 44 - 65535 = NOT DEFINED

E-3 ONLY - STATUS BLOCK 19

WORD 15 METERED NPG B STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 15	METERED NPG B STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG B STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 19 = BUFFER SPACE FOR 19 MORE MESSAGES 20 = METERED NPG EMPTY 21 - 65535 = NOT DEFINED

WORD 16 METERED NPG C STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 16	METERED NPG C STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG C STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 19 = BUFFER SPACE FOR 19 MORE MESSAGES 20 = METERED NPG EMPTY 21 - 65535 = NOT DEFINED

WORD 17 METERED NPG D STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 17	METERED NPG D STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG D STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 29 = BUFFER SPACE FOR 29 MORE MESSAGES 30 = METERED NPG EMPTY 31 - 65535 = NOT DEFINED

WORD 18 METERED NPG E STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 18	METERED NPG E STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG E STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 29 = BUFFER SPACE FOR 29 MORE MESSAGES 30 = METERED NPG EMPTY 31 - 65535 = NOT DEFINED

E-3 ONLY - STATUS BLOCK 19

WORD 19 METERED NPG F STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 19	METERED NPG F STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG F STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 29 = BUFFER SPACE FOR 29 MORE MESSAGES 30 = METERED NPG EMPTY 31 - 65535 = NOT DEFINED

WORD 20 METERED NPG G STATUS WORD

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 20	METERED NPG G STATUS															

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	METERED NPG G STATUS 0 = METERED NPG FULL (NO BUFFERS AVAILABLE) 1 = BUFFER SPACE FOR 1 MORE MESSAGE . . . 29 = BUFFER SPACE FOR 29 MORE MESSAGES 30 = METERED NPG EMPTY 31 - 65535 = NOT DEFINED

40.5.19 VMF Route Data. (Block 20)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	STN_1															
wd 4	STN_2															
wd 5	STN_3															
wd 6	STN_4															
wd 7	NUMBER OF ROUTES FOR STN_1															
wd 8	NUMBER OF ROUTES FOR STN_2															
wd 9	NUMBER OF ROUTES FOR STN_3															
wd 10	NUMBER OF ROUTES FOR STN_4															
wd 11	ROUTE DATA FOR STN_1 WORD 1															
wd 12	ROUTE DATA FOR STN_1 WORD 2															
wd 13	ROUTE DATA FOR STN_1 WORD 3															
wd 14	ROUTE DATA FOR STN_1 WORD 4															
wd 15	ROUTE DATA FOR STN_2 WORD 1															
wd 16	ROUTE DATA FOR STN_2 WORD 2															
wd 17	ROUTE DATA FOR STN_2 WORD 3															
wd 18	ROUTE DATA FOR STN_2 WORD 4															
wd 19	ROUTE DATA FOR STN_3 WORD 1															
wd 20	ROUTE DATA FOR STN_3 WORD 2															
wd 21	ROUTE DATA FOR STN_3 WORD 3															
wd 22	ROUTE DATA FOR STN_3 WORD 4															
wd 23	ROUTE DATA FOR STN_4 WORD 1															
wd 24	ROUTE DATA FOR STN_4 WORD 2															
wd 25	ROUTE DATA FOR STN_4 WORD 3															
wd 26	ROUTE DATA FOR STN_4 WORD 4															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 20

40.5.19.1 Route Source Track Number Words 1-4. (Block 20, Words 3-6)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3		STN_1														
wd 4		STN_2														
wd 5		STN_3														
wd 6		STN_4														

The bit designation shall be as follows:

BIT	DESIGNATION
0-14	SOURCE TRACK NUMBER OF ROUTE (STN_1-STN_4) 0 = NO STATEMENT 1-32767 = STN OF ROUTE
15	NOT USED

FOR NAVY SHIPBOARD AND NAVY AIRBORNE: THIS WORD IS NOT USED.

40.5.19.2 Number of Routes Words 1-4. (Block 20, Words 7-10)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 7													R_1			
wd 8													R_2			
wd 9													R_3			
wd 10													R_4			

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	NUMBER OF ROUTE (R_j) FOR EACH SOURCE TRACK NUMBER (STN_j) (WHERE j = 1, 2, 3, 4)
4-15	NOT USED

FOR NAVY SHIPBOARD AND NAVY AIRBORNE: THIS WORD IS NOT USED.

40.5.19.3 Route Data For STN Words. (Block 20, Words 11-26)

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0	H
wd 11	M	DEST		REP		GAI LOC			REC RATE				RT NUM				STN 1
wd 12	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 13	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 14	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 15	M	DEST		REP		GAI LOC			REC RATE				RT NUM				STN 2
wd 16	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 17	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 18	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 19	M	DEST		REP		GAI LOC			REC RATE				RT NUM				STN 3
wd 20	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 21	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 22	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 23	M	DEST		REP		GAI LOC			REC RATE				RT NUM				STN 4
wd 24	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 25	M	DEST		REP		GAI LOC			REC RATE				RT NUM				
wd 26		DEST		REP		GAI LOC			REC RATE				RT NUM				

The bit designation shall be as follows:

BIT	DESIGNATION
0-3	ROUTE NUMBER (RT NUM) RANGE: 0-15
4-7	RECURRENCE RATE (REC RATE) RANGE: 0-15
8-10	GROUP ADDRESS INDICATOR LOCATION (GAI LOC) ORDINAL POSITION OF THE TERMINAL'S TRACK NUMBER IN ROUTE ESTABLISHMENT MESSAGE 0 = FIRST TN 1 = SECOND TN : : : 7 = EIGHTH TN

FOR NAVY SHIPBOARD AND NAVY AIRBORNE: THIS WORD IS NOT USED.

BIT DESIGNATION (CONTINUED)

11-12 REPETITION (REP)
NUMBER OF RETRANSMISSIONS TO BE ATTEMPTED IF MONITORING IS REQUIRED

13-14 DESTINATION (DEST)

BITS 14 • 13

0 • 0	TERMINAL IS NOT A DESTINATION ON ROUTE
0 • 1	TERMINAL TN IS A DESTINATION ON ROUTE
1 • 0	ONE OF THE TERMINAL'S SECONDARY TNS IS A DESTINATION ON ROUTE
1 • 1	ROUTE IS "NO STATEMENT"

15 MONITOR (M)
DENOTES WHETHER TERMINAL SHOULD EXPECT TO HEAR RETRANSMISSIONS BY THE NEXT RELAY IN THE ROUTE
0 = MONITORING NOT REQUIRED
1 = MONITORING REQUIRED

FOR NAVY SHIPBOARD AND NAVY AIRBORNE: THIS WORD IS NOT USED.

40.5.20 Connectivity Data. (Block 21 through 23) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	DIRECT COMMUNICANT WORD 1															
wd 4	DIRECT COMMUNICANT WORD 2															
wd 5	DIRECT COMMUNICANT WORD 1															
wd 6	DIRECT COMMUNICANT WORD 2															
wd 7	DIRECT COMMUNICANT WORD 1															
wd 8	DIRECT COMMUNICANT WORD 2															
wd 9	DIRECT COMMUNICANT WORD 1															
wd 10	DIRECT COMMUNICANT WORD 2															
wd 11	DIRECT COMMUNICANT WORD 1															
wd 12	DIRECT COMMUNICANT WORD 2															
wd 13	DIRECT COMMUNICANT WORD 1															
wd 14	DIRECT COMMUNICANT WORD 2															
wd 15	DIRECT COMMUNICANT WORD 1															
wd 16	DIRECT COMMUNICANT WORD 2															
wd 17	DIRECT COMMUNICANT WORD 1															
wd 18	DIRECT COMMUNICANT WORD 2															
wd 19	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 1															
wd 20	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 2															
wd 21	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 3															
wd 22	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 4															
wd 23	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 5															
wd 24	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 6															
wd 25	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 7															
wd 26	INDIRECT COMMUNICANTS THROUGH DIRECT (1) WORD 8															
wd 27	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 1															
wd 28	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 2															
wd 29	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 3															
wd 30	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 4															
wd 31	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 5															
wd 32	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 6															

STATUS BLOCK 21-23

40.5.20 Continued. (Block 21 through 23) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 7															
wd 4	INDIRECT COMMUNICANTS THROUGH DIRECT (2) WORD 8															
wd 5	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 1															
wd 6	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 2															
wd 7	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 3															
wd 8	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 4															
wd 9	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 5															
wd 10	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 6															
wd 11	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 7															
wd 12	INDIRECT COMMUNICANTS THROUGH DIRECT (3) WORD 8															
wd 13	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 1															
wd 14	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 2															
wd 15	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 3															
wd 16	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 4															
wd 17	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 5															
wd 18	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 6															
wd 19	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 7															
wd 20	INDIRECT COMMUNICANTS THROUGH DIRECT (4) WORD 8															
wd 21	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 1															
wd 22	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 2															
wd 23	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 3															
wd 24	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 4															
wd 25	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 5															
wd 26	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 6															
wd 27	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 7															
wd 28	INDIRECT COMMUNICANTS THROUGH DIRECT (5) WORD 8															
wd 29	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 1															
wd 30	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 2															
wd 31	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 3															
wd 32	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 4															

STATUS BLOCK 21-23

40.5.20 Continued. (Block 21 through 23) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 5															
wd 4	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 6															
wd 5	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 7															
wd 6	INDIRECT COMMUNICANTS THROUGH DIRECT (6) WORD 8															
wd 7	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 1															
wd 8	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 2															
wd 9	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 3															
wd 10	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 4															
wd 11	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 5															
wd 12	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 6															
wd 13	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 7															
wd 14	INDIRECT COMMUNICANTS THROUGH DIRECT (7) WORD 8															
wd 15	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 1															
wd 16	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 2															
wd 17	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 3															
wd 18	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 4															
wd 19	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 5															
wd 20	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 6															
wd 21	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 7															
wd 22	INDIRECT COMMUNICANTS THROUGH DIRECT (8) WORD 8															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 21-23

40.5.20.1 Direct Communicant Words. (Block 21, Words 3-18) - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 1		DIRECT TN (1)														
wd 2															Q1	
wd 3		DIRECT TN (2)														
wd 4															Q2	
wd 5		DIRECT TN (3)														
wd 6															Q3	
wd 7		DIRECT TN (4)														
wd 8															Q4	
wd 9		DIRECT TN (5)														
wd 10															Q5	
wd 11		DIRECT TN (6)														
wd 12															Q6	
wd 13		DIRECT TN (7)														
wd 14															Q7	
wd 15		DIRECT TN (8)														
wd 16															Q8	

The bit designation shall be as follows:

WORDS 1, 3, 5, 7, 9. 11. 13. 15

BIT	DESIGNATION
0-14	DIRECT TRACK NUMBER (DIRECT TN (1) THROUGH DIRECT TN (8)) TN OF DIRECT COMMUNICANT
15	NOT USED

WORDS 2, 4, 6, 8, 10, 12, 14, 16

BIT	DESIGNATION
0-1	LINK QUALITY (Qj) OF DIRECT TRACK NUMBER (DIRECT TNj) (WHERE j=1, 2, 3...8)
2-15	NOT USED

STATUS BLOCK 20

40.5.20.2 Indirect Communicant Through Direct Communicant Words. (Block 21, Words 19-32, Block 22, Words 3-32, Block 23, Words 3-22) - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 1		INDIRECT TN (1,1)H														
wd 2		INDIRECT TN (2,1)H														
wd 3		INDIRECT TN (3,1)H														
wd 4		INDIRECT TN (4,1)H														
wd 5		INDIRECT TN (5,1)H														
wd 6		INDIRECT TN (6,1)H														
wd 7		INDIRECT TN (7,1)H														
wd 8		INDIRECT TN (8,1)H														
:		:														
wd 57		INDIRECT TN (1,8)I														
wd 58		INDIRECT TN (2,8)I														
wd 59		INDIRECT TN (3,8)I														
wd 60		INDIRECT TN (4,8)I														
wd 61		INDIRECT TN (5,8)I														
wd 62		INDIRECT TN (6,8)I														
wd 63		INDIRECT TN (7,8)I														
wd 64		INDIRECT TN (8,8)I														

H INDIRECT COMMUNICANTS THROUGH DIRECT TN (1)
I INDIRECT COMMUNICANTS THROUGH DIRECT TN (8)

The bit designation shall be as follows:

BIT	DESIGNATION
0-14	TRACK NUMBER OF INDIRECT COMMUNICANT, i (i=1,2,3...8) CONNECTED THROUGH DIRECT TRACK NUMBER, j (j=1,2,3...8) (INDIRECT TN (i,j)
15	NOT USED

STATUS BLOCK 24

40.5.21 Position Status Request/Response. (Block 24) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	POSITION REQUEST/RESPONSE CONTROL WORD															
wd 4	TRACK NUMBER															
wd 5	UNIT DESIGNATOR WORD 1															
wd 6	UNIT DESIGNATOR WORD 2															
wd 7	UNIT DESIGNATOR WORD 3															
wd 8	REQUESTED POSITION LATITUDE WORD 1															
wd 9	REQUESTED POSITION LATITUDE WORD 2															
wd 10	REQUESTED POSITION LONGITUDE WORD 1															
wd 11	REQUESTED POSITION LONGITUDE WORD 2															
wd 12	REQUESTED POSITION UTM COORDINATES WORD 1															
wd 13	REQUESTED POSITION UTM COORDINATES WORD 2															
wd 14	REQUESTED POSITION UTM COORDINATES WORD 3															
wd 15	REQUESTED POSITION UTM COORDINATES WORD 4															
wd 16	REQUESTED POSITION UTM COORDINATES WORD 5															
wd 17	REQUESTED POSITION UTM COORDINATES WORD 6															
wd 18	REQUESTED POSITION UTM COORDINATES WORD 7															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 24

40.5.21.1 Position Request/Response Control Word. (Block 24, Word 3) - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 1	UD/TN															UTM/LL

The bit designation shall be as follows:

BIT	DESIGNATION
0	UTM/LAT-LONG DESIGNATOR (UTM/LL) LOGIC 1 = POSITION REQUEST/RESPONSE FORMAT IS IN UTM/UPS COORDINATES LOGIC 0 = POSITION REQUEST/RESPONSE FORMAT IS IN LATITUDE-LONGITUDE COORDINATED
1-14	NOT USED
15	UNIT/DESIGNATOR/TRACK NUMBER (UD/TN) LOGIC 1 = REQUEST/RESPONSE IS BY UNIT DESIGNATOR LOGIC 0 = REQUEST/RESPONSE IS BY TRACK NUMBER

40.5.21.2 Track Number. (Block 24, Word 4). - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 4		TRACK NUMBER														

The bit designation shall be as follows:

BIT	DESIGNATION
0-14	TRACK NUMBER CONSISTS OF FIVE OCTAL DIGITS (00000 TO 77777) D4 D3 D2 D1 D0 BITS 14,13,12 11,10,9 8,7,6 5,4,3 2,1,0
15	NOT USED

40.5.21.3 Unit Designator Words. (Block 24, Words 5 through 7). - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 5	CHARACTER 3				CHARACTER 2						CHARACTER 1					
wd 6	CH 6		CHARACTER 5						CHARACTER 4						CH 3	
wd 7	CHARACTER 8						CHARACTER 7						CHARACTER 6			

The bit designation shall be as follows:

EIGHT CHARACTER (6 BITS PER CHARACTER) UNIT DESIGNATOR

CHARACTER VALUE

0	REQUEST BY TRACK NUMBER (ALL CHARACTERS WILL BE SET TO ZERO)
1-63	VALID CHARACTER CODE

40.5.21.4 Requested Position Latitude Words. (Block 24, Words 8 and 9). - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 8	LATITUDE															LSB
wd 9										MSB	LATITUDE					

The bit designation shall be as follows:

WORD 1

BIT	DESIGNATION
0-15	16 BITS OF 23 BIT REQUESTED POSITION LATITUDE SOUTH LATITUDE QUANTITIES SHALL BE IN TWO'S COMPLEMENT NOTATION. REMAINING 7 BITS ARE LOCATED IN WORD 2 LSB: 90/4, 194, 303 DEG

WORD 2

BIT	DESIGNATION
0-6	REMAINING 7 BITS OF 23 BIT REQUESTED POSITION LATITUDE
7-15	NOT USED

40.5.21.5 Requested Position Longitude Words. (Block 24, Words 10 and 11). - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 10	LONGITUDE															LSB
wd 11									MSB	LONGITUDE						

The bit designation shall be as follows:

WORD 1

BIT	DESIGNATION
0-15	16 BITS OF 24 BIT REQUESTED POSITION LONGITUDE WEST LONGITUDE QUANTITIES SHALL BE IN TWO'S COMPLEMENT NOTATION. REMAINING 8 BITS ARE LOCATED IN WORD 2. LSB: 180/8, 388, 607 DEG

WORD 2

BIT	DESIGNATION
0-7	REMAINING 8 BITS OF 24 BIT REQUESTED POSITION LONGITUDE
8-15	NOT USED

40.5.21.6 Requested Position UTM Coordinate Words. (Block 24, Words 12 through 18) - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0 LSB
wd 1	UTM/UPS CHARACTER 2								UTM/UPS CHARACTER 1							
wd 2	UTM/UPS CHARACTER 4								UTM/UPS CHARACTER 3							
wd 3	UTM/UPS CHARACTER 6								UTM/UPS CHARACTER 5							
wd 4	UTM/UPS CHARACTER 8								UTM/UPS CHARACTER 7							
wd 5	UTM/UPS CHARACTER 10								UTM/UPS CHARACTER 9							
wd 6	UTM/UPS CHARACTER 12								UTM/UPS CHARACTER 11							
wd 7									UTM/UPS CHARACTER 13							

The bit designation shall be as follows:

UTM/UPS COORDINATES SHALL BE REPRESENTED BY THE FOLLOWING THIRTEEN (13) CHARACTER STRING (WHERE THE LEFTMOST CHARACTER IS CHARACTER 1 AND THE RIGHTMOST CHARACTER IS CHARACTER 13):

```
CHAR. NO.   1 2 3    4 5    6 7 8 9    10 11 12 13
            D D L    L L    D D D D     D  D  D  D
           •••••••  •••••  •••••••••  ••••••••••••
            GRID    AREA    EASTING     NORTHING
            ZONE
```

IN UPS COORDINATES, CHARACTERS 1 AND 2 SHALL BE SET TO ZERO (0). EACH OF THE ABOVE CHARACTERS SHALL BE 8-BIT ASCII CODED REPRESENTATIONS OF A DIGIT (D) OR A LETTER (L).

WORD 1, BITS 0-7: UTM/UPS CHARACTER 1 - MOST SIGNIFICANT DIGIT OF GRID ZONE.

WORD 1, BITS 8-15: UTM/UPS CHARACTER 2 - LEAST SIGNIFICANT DIGIT OF GRID ZONE.

WORD 2, BITS 0-7: UTM/UPS CHARACTER 3 - GRID ZONE LETTER.

WORD 2, BITS 8-15: UTM/UPS CHARACTER 4 - AREA COLUMN (A LETTER) DESIGNATION.

WORD 3, BITS 0-7: UTM/UPS CHARACTER 5 - AREA ROW (A LETTER) DESIGNATION.

WORD 3, BITS 8-15: UTM/UPS CHARACTER 6 - TEN THOUSANDS DIGIT OF EASTING ZONE.

WORD 4, BITS 0-7:	UTM/UPS CHARACTER 7 - THOUSANDS DIGIT OF EASTING
WORD 4, BITS 8-15:	UTM/UPS CHARACTER 8 - HUNDREDS DIGIT OF EASTING.
WORD 5, BITS 0-7:	UTM/UPS CHARACTER 9 - TENS DIGIT OF EASTING
WORD 5, BITS 8-15:	UTM/UPS CHARACTER 10 - TEN THOUSANDS DIGIT OF NORTHING.
WORD 6, BITS 0-7:	UTM/UPS CHARACTER 11 - THOUSANDS DIGIT OF NORTHING
WORD 6, BITS 8-15:	UTM/UPS CHARACTER 12 - HUNDREDS DIGIT OF NORTHING.
WORD 7, BITS 0-7:	UTM/UPS CHARACTER 13 - TENDS DIGIT OF NORTHING

STATUS BLOCK 24

40.5.22 Needline Status. (Block 25 through 27) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NCS STATUS/BUFFER STATUS															
wd 4	NEEDLINE STATUS WORD 1															
wd 5	NEEDLINE STATUS WORD 2															
wd 6	NEEDLINE STATUS WORD 3															
wd 7	NEEDLINE STATUS WORD 4															
wd 8	NEEDLINE STATUS WORD 5															
wd 9	NEEDLINE STATUS WORD 6															
wd 10	NEEDLINE STATUS WORD 7															
wd 11	NEEDLINE STATUS WORD 8															
wd 12	NEEDLINE STATUS WORD 9															
wd 13	NEEDLINE STATUS WORD 10															
wd 14	NEEDLINE STATUS WORD 11															
wd 15	NEEDLINE STATUS WORD 12															
wd 16	NEEDLINE STATUS WORD 13															
wd 17	NEEDLINE STATUS WORD 14															
wd 18	NEEDLINE STATUS WORD 15															
wd 19	NEEDLINE STATUS WORD 16															
wd 20	NEEDLINE STATUS WORD 17															
wd 21	NEEDLINE STATUS WORD 18															
wd 22	NEEDLINE STATUS WORD 19															
wd 23	NEEDLINE STATUS WORD 20															
wd 24	NEEDLINE STATUS WORD 21															
wd 25	NEEDLINE STATUS WORD 22															
wd 26	NEEDLINE STATUS WORD 23															
wd 27	NEEDLINE STATUS WORD 24															
wd 28	NEEDLINE STATUS WORD 25															
wd 29	NEEDLINE STATUS WORD 26															
wd 30	NEEDLINE STATUS WORD 27															
wd 31	NEEDLINE STATUS WORD 28															
wd 32	NEEDLINE STATUS WORD 29															

STATUS BLOCK 25-27

40.5.22 Continued. (Block 25 through 27) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NEEDLINE STATUS WORD 30															
wd 4	NEEDLINE STATUS WORD 31															
wd 5	NEEDLINE STATUS WORD 32															
wd 6	NEEDLINE STATUS WORD 33															
wd 7	NEEDLINE STATUS WORD 34															
wd 8	NEEDLINE STATUS WORD 35															
wd 9	NEEDLINE STATUS WORD 36															
wd 10	NEEDLINE STATUS WORD 37															
wd 11	NEEDLINE STATUS WORD 38															
wd 12	NEEDLINE STATUS WORD 39															
wd 13	NEEDLINE STATUS WORD 40															
wd 14	NEEDLINE STATUS WORD 41															
wd 15	NEEDLINE STATUS WORD 42															
wd 16	NEEDLINE STATUS WORD 43															
wd 17	NEEDLINE STATUS WORD 44															
wd 18	NEEDLINE STATUS WORD 45															
wd 19	NEEDLINE STATUS WORD 46															
wd 20	NEEDLINE STATUS WORD 47															
wd 21	NEEDLINE STATUS WORD 48															
wd 22	NEEDLINE STATUS WORD 49															
wd 23	NEEDLINE STATUS WORD 50															
wd 24	NEEDLINE STATUS WORD 51															
wd 25	NEEDLINE STATUS WORD 52															
wd 26	NEEDLINE STATUS WORD 53															
wd 27	NEEDLINE STATUS WORD 54															
wd 28	NEEDLINE STATUS WORD 55															
wd 29	NEEDLINE STATUS WORD 56															
wd 30	NEEDLINE STATUS WORD 57															
wd 31	NEEDLINE STATUS WORD 58															
wd 32	NEEDLINE STATUS WORD 59															

STATUS BLOCK 25-27

40.5.22 Continued. (Block 25 through 27) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	NEEDLINE STATUS WORD 60															
wd 4	NEEDLINE STATUS WORD 61															
wd 5	NEEDLINE STATUS WORD 62															
wd 6	NEEDLINE STATUS WORD 63															
wd 7	NEEDLINE STATUS WORD 64															
wd 8	NOT USED															
wd 9	NOT USED															
wd 10	NOT USED															
wd 11	NOT USED															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 25-27

40.5.22.1 NCS Status/Buffer Status Words. (Block 25, Word 3) - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	TNCS	NNCS	NSIP	NCNNA	NSNNA										STBO	SRBO

The bit designation shall be as follows:

BIT	DESIGNATION
0	LOGIC 1 = SICP RECEIVE BUFFER OVERFLOW (SRBO)
1	LOGIC 1 = SICP TRANSMIT BUFFER OVERFLOW (STBO)
2-10	NOT USED
11	LOGIC 1 = NET STATUS NEEDLINE NOT ACTIVE (NSNNA)
12	LOGIC 1 = NET CONTROL NEEDLINE NOT ACTIVE (NCNNA)
13	LOGIC 1 = NO NCS OR FAILED NCS; NCS SEARCH IN PROGRESS (NSIP)
14	LOGIC 1 = NO NCS, FAILED OR UNFAILED (NNCS)
15	LOGIC 1 = TERMINAL IS AN NCS; BITS 11-14 ARE INVALID

40.5.22.2 Needline Status Words. (Block 25, Words 4-32, Block 26, Words 3-32, Block 27, Words 3-7) - ARMY ONLY

MSB LSB

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
NEEDLINE NPG NO.									TRI	PTH0S	PTH1S	PME	RTS		

The bit designation shall be as follows:

BIT	DESIGNATION
0	NOT USED
2	LOGIC 1 = EXCESSIVE RESPONSE TIME STATUS (RTS)
3	LOGIC 1 = TWO-WAY PATH MONITORING ENABLE (PME)
4	LOGIC 1 = PATH 1 FAILED (PTH1S)
5	LOGIC 1 = PATH 0 FAILED (PTH0S)
6	TRANSMIT/RECEIVE INDICATOR (TRI) LOGIC 1 = TRANSMIT LOGIC 0 = RECEIVE
7-15	NEEDLINE NPG NUMBER 0-31 = NOT USED 32-509 = NPG NUMBER 510-512 = NOT USED

NOTE: NEEDLINE STATUS WORD N CORRESPONDS TO SLOT BLOCK N (1 # N # 64).

40.5.23 Communicant Status. (Block 28) - ARMY ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	COMMUNICANT STATUS WORD 1															
wd 4	COMMUNICANT STATUS WORD 2															
wd 5	COMMUNICANT STATUS WORD 3															
wd 6	COMMUNICANT STATUS WORD 4															
wd 7	COMMUNICANT STATUS WORD 5															
wd 8	COMMUNICANT STATUS WORD 6															
wd 9	COMMUNICANT STATUS WORD 7															
wd 10	COMMUNICANT STATUS WORD 8															
wd 11	COMMUNICANT STATUS WORD 9															
wd 12	COMMUNICANT STATUS WORD 10															
wd 13	COMMUNICANT STATUS WORD 11															
wd 14	COMMUNICANT STATUS WORD 12															
wd 15	COMMUNICANT STATUS WORD 13															
wd 16	COMMUNICANT STATUS WORD 14															
wd 17	COMMUNICANT STATUS WORD 15															
wd 18	COMMUNICANT STATUS WORD 16															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 28

40.5.23.1 Communicant Status Words. (Block 28, Words 3-18) - ARMY ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 1	CQ8		QC7		QC6		QC5		QC4		QC3		QC2		QC1	
wd 2	QC16		QC15		QC14		QC13		QC12		QC11		QC10		QC9	
wd 3	QC24		QC23		QC22		QC21		QC20		QC19		QC18		QC17	
wd 4	QC32		QC31		QC30		QC29		QC28		QC27		QC26		QC25	
wd 5	QC40		QC39		QC38		QC37		QC36		QC35		QC34		QC33	
wd 6	QC48		QC47		QC46		QC45		QC44		QC43		QC42		QC41	
wd 7	QC56		QC55		QC54		QC53		QC52		QC51		QC50		QC49	
wd 8	QC64		QC63		QC62		QC61		QC60		QC59		QC58		QC57	
wd 9	QC72		QC71		QC70		QC69		QC68		QC67		QC66		QC65	
wd 10	QC80		QC79		QC78		QC77		QC76		QC75		QC74		QC73	
wd 11	QC88		QC87		QC86		QC85		QC84		QC83		QC82		QC81	
wd 12	QC96		QC95		QC94		QC93		QC92		QC91		QC90		QC89	
wd 13	QC104		QC103		QC102		QC101		QC100		QC99		QC98		QC97	
wd 14	QC112		QC111		QC110		QC109		QC108		QC107		QC106		QC105	
wd 15	QC120		QC119		QC118		QC117		QC116		QC115		QC114		QC113	
wd 16	QC128		QC127		QC126		QC125		QC124		QC123		QC122		QC121	

The bit designation shall be as follows:

WORD 1

BIT	DESIGNATION
0-1	CONNECTIVITY QUALITY (QC1)
:	: : :
14-15	CONNECTIVITY QUALITY (QC8)

THROUGH

STATUS BLOCK 28

WORD 16

BIT	DESIGNATION
0-1	CONNECTIVITY QUALITY (QC121)
:	: : :
14-15	CONNECTIVITY QUALITY (QC128)

NOTE: COMMUNICANT STATUS WORDS 1-16 CONTAIN (UP TO) 64 OR 128 CONNECTIVITY QUALITIES. EACH CONNECTIVITY QUALITY IS BASED UPON ERASURE COUNTS. IF THE NCS REPORTING INTERVAL IS 64 SLOTS, ONLY THE FIRST 8 WORDS ARE VALID; OTHERWISE ALL 16 WORDS ARE VALID.

40.5.24 Navy Status. (Block 29) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	COMMUNICATION AND TSR DATA MSG BUFFER STATUS															
wd 4	SICP BUFFER STATUS WORD															
wd 5	TARGET SORTING BUFFER STATUS (NAVY AIR ONLY)															
wd 6	TARGET SORTING GROUP B PRIORITY STATUS (NAVY AIR ONLY)															
wd 7	TARGET SORTING GROUP B ROUTINE STATUS (NAVY AIR ONLY)															
wd 8	TARGET SORTING GROUP B PENDING STATUS (NAVY AIR ONLY)															
wd 9	TARGET SORTING GROUP A PRIORITY STATUS (NAVY AIR ONLY)															
wd 10	TARGET SORTING GROUP A ROUTINE STATUS (NAVY AIR ONLY)															
wd 11	TARGET SORTING GROUP A PENDING STATUS (NAVY AIR ONLY)															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 29

40.5.24.1 Communication and TSR Data Message Buffer Status. (Block 29, Word 3) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 3	LTTI	RI	LTTID	LTTIP	LTTIM						TSR DATA MESSAGE BUFFER STATUS					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	TSR DATA MESSAGE BUFFER STATUS. NUMBER OF BUFFERS AVAILABLE IN THE SICP FOR MESSAGES ON THE TSR NPG. RANGE: 0 - 60 61 - 63 NOT USED
6-10	NOT USED
11	LONG TERM TRANSMIT INHIBIT FROM MUX (LTTIM) LOGIC 1 = LONG TERM TRANSMIT INHIBIT ACTIVATED FROM HOST BY TERMINAL INPUT MESSAGE 16 OR INITIALIZATION BLOCK 56. - NAVY SHIPBOARD ONLY
12	LONG TERM TRANSMIT INHIBIT FROM PANEL (LTTIP) LOGIC 1 = LONG TERM TRANSMIT INHIBIT ACTIVATED FROM ICP OR SACP. - NAVY SHIPBOARD ONLY
13	LONG TERM TRANSMIT INHIBIT FROM DISCRETE (LTTID) LOGIC 1 = LONG TERM TRANSMIT INHIBIT ACTIVATED FROM DISCRETE. - NAVY SHIPBOARD ONLY
14	RELAY INHIBIT STATUS (RI) LOGIC 1 = RELAY INHIBIT IS IN EFFECT
15	LONG TERM TRANSMIT INHIBIT (LTTI) LOGIC 1 = LONG TERM TRANSMIT INHIBIT IS IN EFFECT

40.5.24.2 SICP Buffer Status Word. (Block 29, Word 4) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 4		BU3					BU2					BU1				

The bit designation shall be as follows:

BIT	DESIGNATION
0-4	BUFFER ONE STATUS (BU1) RANGE: 0 - 20 VALUES 21 - 31 ARE NOT USED. NUMBER OF BUFFERS AVAILABLE IN THE SICP FOR MESSAGES ON THE FIRST HOST-DEFINED NPG (SEE 30.4.12.11).
5-9	BUFFER TWO STATUS (BU2) RANGE: 0 - 20 VALUES 21 - 31 ARE NOT USED. NUMBER OF BUFFERS AVAILABLE IN THE SICP FOR MESSAGES ON THE SECOND HOST-DEFINED NPG (SEE 30.4.12.12).
10-14	BUFFER THREE STATUS (BU3) RANGE: 0 - 20 VALUES 21 - 31 ARE NOT USED. NUMBER OF BUFFERS AVAILABLE IN THE SICP FOR THE THIRD HOST-DEFINED NPG. (SEE 30.4.12.2)
15	NOT USED

40.5.24.3 Target Sorting Buffer Status . (Block 29, Word 5)

NAVY AIR ONLY

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 5					BUFF B						BUFF A					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TARGET SORTING GROUP A BUFFERS AVAILABLE (BUFF A) - NAVY AIR ONLY RANGE: 0 - 40 VALUES 41 - 63 ARE NOT USED
6-11	NUMBER OF TARGET SORTING GROUP B BUFFERS AVAILABLE (BUFF B) - NAVY AIR ONLY RANGE: 0 - 40 VALUES 41 - 63 ARE NOT USED
12-15	SPARE

40.5.24.4 Target Sorting Group B Priority Status. (Block 29, Word 6)

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 6											BUFFBPR					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TRACKS IN TARGET SORTING GROUP B PRIORITY LIST (BUFFBPR) - NAVY AIR ONLY RANGE: 0 - 40
6-15	SPARE

40.5.24.5 Target Sorting Group B Routine Status. (Block 29, Word 7)

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 7											BUFFBR					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TRACKS IN TARGET SORTING GROUP B ROUTINE LIST (BUFFBR) - NAVY AIR ONLY RANGE: 0 - 40
6-15	SPARE

40.5.24.6 Target Sorting Group B Pending Status. (Block 29, Word 8)

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 8											BUFFBPE					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TRACKS IN TARGET SORTING GROUP B PENDING LIST (BUFFBPE) - NAVY AIR ONLY RANGE: 0 - 40
6-15	SPARE

40.5.24.7 Target Sorting Group A Priority Status. (Block 29, Word 9).

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 9											BUFFAPR					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TRACKS IN TARGET SORTING GROUP A PRIORITY LIST (BUFFAPR) - NAVY AIR ONLY RANGE: 0 - 40
6-15	SPARE

40.5.24.8 Target Sorting Group A Routine Status. (Block 29, Word 10)

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 10											BUFFAR					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TRACKS IN TARGET SORTING GROUP A ROUTINE LIST (BUFFAR) - NAVY AIR ONLY RANGE: 0 - 40
6-15	SPARE

40.5.24.9 Target Sorting Group A Pending Status. (Block 29, Word 11)

NAVY AIR ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	LSB 0
wd 11											BUFFAPE					

The bit designation shall be as follows:

BIT	DESIGNATION
0-5	NUMBER OF TRACKS IN TARGET SORTING GROUP A PENDING LIST (BUFFAPE) - NAVY AIR ONLY RANGE: 0 - 40
6-15	SPARE

40.5.25 TSR Status Report Number 1. (Block 30) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	TSR POOL 0, STATUS WORD 1															
wd 4	TSR POOL 0, STATUS WORD 2															
wd 5	TSR POOL 0, STATUS WORD 3															
wd 6	TSR POOL 1, STATUS WORD 1															
wd 7	TSR POOL 1, STATUS WORD 2															
wd 8	TSR POOL 1, STATUS WORD 3															
wd 9	TSR POOL 2, STATUS WORD 1															
wd 10	TSR POOL 2, STATUS WORD 2															
wd 11	TSR POOL 2, STATUS WORD 3															
wd 12	TSR POOL 3, STATUS WORD 1															
wd 13	TSR POOL 3, STATUS WORD 2															
wd 14	TSR POOL 3, STATUS WORD 3															
wd 15	TSR POOL 4, STATUS WORD 1															
wd 16	TSR POOL 4, STATUS WORD 2															
wd 17	TSR POOL 4, STATUS WORD 3															
wd 18	TSR POOL 5, STATUS WORD 1															
wd 19	TSR POOL 5, STATUS WORD 2															
wd 20	TSR POOL 5, STATUS WORD 3															
wd 21	TSR POOL 6, STATUS WORD 1															
wd 22	TSR POOL 6, STATUS WORD 2															
wd 23	TSR POOL 6, STATUS WORD 3															
wd 24	TSR POOL 7, STATUS WORD 1															
wd 25	TSR POOL 7, STATUS WORD 2															
wd 26	TSR POOL 7, STATUS WORD 3															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 30

40.5.25.1 TSR Pool Status Words 1-3. (Block 30, Words 3-26). - NAVY SHIPBOARD AND NAVY AIRBORNE. These words specify TSR Status Words 1-3 for TSR pools 0-7. Status Words 1 and 2 are also reported for the operational pool, in TOM 1, Words 21 and 22 (see 80.1.4.8.2.1.2.16). TSR Status Word 4 for each pool is in Status Block 31 (see 80.1.3.11).

MSB LSB

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
status wd 1	POOL NUMBER				RECEIVE COUNT						STATE			PERIOD		
status wd 2		PERCENTAGE OF POOL USED								PERCENTAGE OF REQUEST SATISFIED						
status wd 3										TSR NPG						

The bit designation shall be as follows:

STATUS WORD 1

BIT	DESIGNATION
0-2	TSR PERIOD NUMBER (PERIOD) THE CURRENT TSR PERIOD NUMBER, MODULO 8. THE NUMBERING OF THE PERIODS BEGINS WITH PERIOD 0 WHICH STARTS JUST AFTER MIDNIGHT (IF THE REALLOCATION PERIOD OFFSET, SEE 80.1.2.12.1, IS NON-ZERO) OR AT MIDNIGHT (IF THE REALLOCATION PERIOD OFFSET IS ZERO). RANGE = 0 TO 7 VALID IF NET TIME IS VALID (SEE TOM 1, 80.1.4.7.1) AND POOL STATE IS 2,3 OR 4.

BIT	DESIGNATION
3-5	STATE OF THE POOL (STATE) 0 = SUSPENDED 1 = INACTIVE: BAD INIT DATA (SEE NOTE) 2 = ACTIVE: ATTEMPTING POOL ENTRY; NO ALLOCATION OF SLOTS. 3 = ACTIVE: MISSED ANNOUNCEMENT; THE TERMINAL IS ALLOCATING SLOTS TO ITSELF BUT WAS UNABLE TO TRANSMIT ITS OWN TSR ANNOUNCEMENT MESSAGE IN THE LAST PERIOD. NOT USED IN CENTRALIZED MODE. 4 = FULLY ACTIVE 5-7 = NOT USED
6-11	RECEIVE COUNT THE NUMBER OF POOL PARTICIPANTS, EXCLUDING ITSELF, FOR WHICH THE TERMINAL HAS VALID DATA. RANGE = 0 - 63 VALID IF POOL STATE IS 2,3 OR 4.
12	RESERVED FOR FUTURE USE.
13-15	POOL NUMBER (TSRPN) THIS VARIABLE IS NEEDED, WHEN TSR POOL STATUS WORDS 1 AND 2 ARE REPORTED IN TOM 1, FOR IDENTIFICATION OF THE DATA. IN STATUS BLOCK 30 THIS VARIABLE IS REDUNDANT SINCE THE POOL NUMBER IS ALSO INDICATED BY THE WORD NUMBER WITHIN THE STATUS BLOCK.

NOTE: THE SICP DOES THE FOLLOWING VALIDITY CHECKS ON A TSR POOL:

1) ALL ACCESS 17, 18 SABs ON THE POOL HAVE THE SAME NPG.
2) NPG NOT EQUAL TO 1, 2, 3, 5, 6, 12, 13 OR 27.
3) THE NUMBER OF ACCESS 17 SABs IS 1, 2 OR 3.
4) THERE IS EXACTLY ONE ACCESS 18 SAB IF THE POOL IS NOT IN CENTRALIZED MODE OR AT MOST ONE ACCESS 18 SAB IF THE POOL IS IN CENTRALIZED MODE.
5) THE REALLOCATION PERIOD IS 6, 12, 18, 24, 30, 36 OR 48 SECONDS.
6) THE ACCESS 17 SABs CAN BE DECOMPOSED INTO 2-512 BASIC BLOCKS.

IF ANY OF THE ABOVE CHECKS FAIL, THE SICP SETS POOL STATE TO "INACTIVE: BAD INIT DATA".

STATUS WORD 2

BIT	DESIGNATION
0-6	PERCENTAGE OF REQUEST SATISFIED THE ALLOCATION TO THE TERMINAL FOR MISSION MESSAGES IN THE CURRENT PERIOD DIVIDED BY THE LAST HOST POOL CAPACITY REQUEST. LSB: 100/127 OF A PERCENT RANGE: 0 TO 100 PERCENT VALUES GREATER THAN 100 PERCENT ARE REPORTED AS 100. VALID IF POOL STATE IS 3 OR 4

NOTE: 1) THIS VARIABLE IS COMPUTED AS:
((#BBs * q) - 1)/((H * W) / L)
where:

1. #Bbs = THE NUMBER OF BASIC BLOCKS CHOSEN FOR OWN TERMINAL AT PREVIOUS FREEZE POINT.
2. q = # SLOTS PER BASIC BLOCK
3. H = LATEST "NUMBER OF MESSAGES" (SEE INITIALIZATION BLOCK 44, CONTROL WORD 3, BITS 5-15) REQUEST FROM THE HOST.
4. W = LATEST "AVERAGE NUMBER OF WORDS PER MESSAGE" (SEE INITIALIZATION BLOCK 44, CONTROL WORD 3, BITS 0-4) REQUEST FROM THE HOST. IN THIS FORMULA, W IS IN ITS RAW (UNCODED) FORM.
5. L = # CODEWORDS (3,6 OR 12) ALLOWED BY THE PACKING LIMIT OF THE TSR NPG.

NOTE: 2) IF THE HOST REQUEST IS 0 AND THE TERMINAL HAS BEEN ALLOCATED SLOTS, THE TERMINAL WILL REPORT THIS VARIABLE AS 100 PERCENT.

NOTE: 3) IF THE TERMINAL HAS BEEN ALLOCATED NO SLOTS (INCLUDING THE CASE WHEN POOL STATE = 2) THE TERMINAL WILL REPORT THIS VARIABLE AS 0.

7	SPARE
8-14	PERCENTAGE OF POOL USED THE SUM OF ALL THE VALID REQUESTS KNOWN TO THE TERMINAL, IN UNITS OF BASIC BLOCKS, DIVIDED BY THE POOL SIZE. LSB: 100/127 OF A PERCENT RANGE: 0 TO 100 PERCENT VALUES GREATER THAN 100 PERCENT (INDICATING TRANSMIT CONFLICTS) ARE REPORTED AS 100. VALID IF POOL STATE IS 2, 3 OR 4
15	SPARE

STATUS WORD 3

BIT	DESIGNATION
0-8	TSR NPG RANGE = 0 TO 511 NOTE: SET TO 0 WHEN POOL STATE IS 0 OR 1
9-15	SPARE

40.5.26 UTM/UPS Own-Position Data. (Block 31)

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	UTM/UPS OWN-POSITION WORD 1															
wd 4	UTM/UPS OWN-POSITION WORD 2															
wd 5	UTM/UPS OWN-POSITION WORD 3															
wd 6	UTM/UPS OWN-POSITION WORD 4															
wd 7	UTM/UPS OWN-POSITION WORD 5															
wd 8	UTM/UPS OWN-POSITION WORD 6															
wd 9	UTM/UPS OWN-POSITION WORD 7															
wd 10	NOT USED															
wd 11	NOT USED															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

STATUS BLOCK 31

40.5.26.1 UTM/UPS Own-Position Words. (Block 31, Words 3-9). - ARMY ONLY

The format for the UTM/UPS own-position Words 1-7 shall be identical to the requested position UTM coordinate Words 1-7 (Block 24).

STATUS BLOCK 32

40.5.27 TSR Basic Blocks Selected Number 1 (Own Terminal). (Block 32) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	BASIC BLOCKS SELECTED WORD 1															
wd 4	BASIC BLOCKS SELECTED WORD 2															
wd 5	BASIC BLOCKS SELECTED WORD 3															
wd 6	BASIC BLOCKS SELECTED WORD 4															
wd 7	BASIC BLOCKS SELECTED WORD 5															
wd 8	BASIC BLOCKS SELECTED WORD 6															
wd 9	BASIC BLOCKS SELECTED WORD 7															
wd 10	BASIC BLOCKS SELECTED WORD 8															
wd 11	BASIC BLOCKS SELECTED WORD 9															
wd 12	BASIC BLOCKS SELECTED WORD 10															
wd 13	BASIC BLOCKS SELECTED WORD 11															
wd 14	BASIC BLOCKS SELECTED WORD 12															
wd 15	BASIC BLOCKS SELECTED WORD 13															
wd 16	BASIC BLOCKS SELECTED WORD 14															
wd 17	BASIC BLOCKS SELECTED WORD 15															
wd 18	BASIC BLOCKS SELECTED WORD 16															
wd 19	BASIC BLOCKS SELECTED WORD 17															
wd 20	BASIC BLOCKS SELECTED WORD 18															
wd 21	BASIC BLOCKS SELECTED WORD 19															
wd 22	BASIC BLOCKS SELECTED WORD 20															
wd 23	BASIC BLOCKS SELECTED WORD 21															
wd 24	BASIC BLOCKS SELECTED WORD 22															
wd 25	BASIC BLOCKS SELECTED WORD 23															
wd 26	BASIC BLOCKS SELECTED WORD 24															
wd 27	BASIC BLOCKS SELECTED WORD 25															
wd 28	BASIC BLOCKS SELECTED WORD 26															
wd 29	BASIC BLOCKS SELECTED WORD 27															
wd 30	BASIC BLOCKS SELECTED WORD 28															
wd 31	BASIC BLOCKS SELECTED WORD 29															
wd 32	BASIC BLOCKS SELECTED WORD 30															

NOTE: STATUS BLOCK 32-35 ARE RESERVED FOR SOFTWARE TESTING STATUS BLOCK 32

40.5.27.1 Basic Blocks Selected Words (Own Terminal). (Block 32, Words 3-32). Reserved for test purposes. - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 3	15															0
wd 4	31															16
wd 5	47															32
wd 6	63															48
wd 7	79															64
wd 8	95															80
wd 9	111															96
wd 10	127															112
wd 11	143															128
wd 12	159															144
wd 13	175															160
wd 14	191															176
wd 15	207															192
wd 16	223															208
wd 17	239															224
wd 18	255															240
wd 19	271															256
wd 20	287															272
wd 21	303															288
wd 22	319															304
wd 23	335															320
wd 24	351															336
wd 25	367															352
wd 26	383															368
wd 27	399															384
wd 28	415															400
wd 29	431															416
wd 30	447															432
wd 31	463															448
wd 32	479															464

NOTES FOR THIS BLOCK ARE ON FOLLOWING PAGE.

STATUS BLOCK 32

Coding for each bit (each bit corresponds to a Basic Block in the TSR Pool):

LOGIC 0 = Basic Block not selected for own terminal transmit
LOGIC 1 = Basic Block was selected for own terminal transmit

Note: These words are updated at the end of slot selection processing. They are valid if pool state is 3 ("Active-Missed Announcement") or 4 ("Fully Active").

40.5.28 TSR Basic Blocks Selected Number 2 (Own Terminal). (Block 33). Reserved for test purposes. - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
wd 1	CONTROL WORD (SEE 40.5.1.1)															
wd 2	ADDRESS WORD (SEE 40.5.1.2)															
wd 3	BASIC BLOCKS SELECTED WORD 31															
wd 4	BASIC BLOCKS SELECTED WORD 32															
wd 5	MAXIMUM TSR EXECUTIVE EXECUTION TIME															
wd 6	NUMBER OF TSR EXECUTIVE EXECUTION TIMES EXCEEDING 4 SLOTS															
wd 7	SLOT ALLOCATION DEGRADED OPERATION															
wd 8	TSR I PARAMETER															
wd 9	TSR K PARAMETER															
wd 10	TSR N PARAMETER															
wd 11	NOT USED															
wd 12	NOT USED															
wd 13	NOT USED															
wd 14	NOT USED															
wd 15	NOT USED															
wd 16	NOT USED															
wd 17	NOT USED															
wd 18	NOT USED															
wd 19	NOT USED															
wd 20	NOT USED															
wd 21	NOT USED															
wd 22	NOT USED															
wd 23	NOT USED															
wd 24	NOT USED															
wd 25	NOT USED															
wd 26	NOT USED															
wd 27	NOT USED															
wd 28	NOT USED															
wd 29	NOT USED															
wd 30	NOT USED															
wd 31	NOT USED															
wd 32	NOT USED															

NOTE: STATUS BLOCK 32-35 ARE RESERVED FOR SOFTWARE TESTING

STATUS BLOCK 33

40.5.28.1 Basic Block Selected Words (Own Terminal). (Block 33, words 3-4). - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

	MSB 15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0 LSB
wd 3	495															480
wd 4	511															496

The bit designation shall be as follows:

BIT	DESIGNATION
0-15	LOGIC 0 = BASIC BLOCK NOT SELECTED FOR TERMINAL TRANSMIT. LOGIC 1 = BASIC BLOCK WAS SELECTED FOR TERMINAL TRANSMIT. THESE WORDS ARE VALID IF POOL STATE IS 3 ("ACTIVE-MISSED ANNOUNCEMENT") OR 4 ("FULLY ACTIVE").

40.5.28.2 Maximum TSR Executive Execution Time. (Block 33, Word 5) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

BIT	DESIGNATION
0-15	MAXIMUM NUMBER OF SLOTS THAT THE TSR EXECUTIVE MODULE HAS TAKEN TO RUN 0 = MAXIMUM IS 4, THE NOMINAL VALUE, OR LESS 1-4 = NOT USED 5-32767 = MAXIMUM NUMBER OF SLOTS

40.5.28.3 Number of TSR Executive Execution Times Exceeding Four Slots. (Block 33, Word 6) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

BIT	DESIGNATION
0-15	NUMBER OF TIMES THAT THE TSR EXECUTIVE TOOK MORE THAN 4 SLOTS TO RUN

40.5.28.4 Slot Allocation Degraded Operation. (Block 33, Word 7) - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

BIT	DESIGNATION
0-14	NOT USED
15	SLOT ALLOCATION PROCESSING DEGRADED OPERATION (SADO) LOGIC 1 = SLOT ALLOCATION PROCESSING FOR THE CURRENT PERIOD DID NOT FINISH PRIOR TO THE START OF THE PERIOD. TSR TRANSMIT SLOTS FOR THE TERMINAL MAY HAVE BEEN LOST.

NOTE: THIS BIT IS LATCHED BY THE SICP UNTIL THE POOL IS SUSPENDED.

40.5.28.5 TSR I Parameter (Block 33, Word 8). - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

BIT	DESIGNATION
0-15	TSR I PARAMETER FOR OWN TERMINAL AS USED IN INDEXED COORDINATED CONTENTION (ICC) ALGORITHM FOR THE CURRENT REALLOCATION PERIOD (SEE TABLE XLVIII-B OF Y240M798A0100 FOR NAVY AIR, AND XLVII-B OF Y240M822A0100 FOR NAVY SHIP)

40.5.28.6 TSR K Parameter (Block 33, Word 9). - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

BIT	DESIGNATION
0-15	TSR K PARAMETER FOR OWN TERMINAL AS USED IN INDEXED COORDINATED CONTENTION (ICC) ALGORITHM FOR THE CURRENT REALLOCATION PERIOD (SEE TABLE XLVIII-C OF Y240M798A0100 FOR NAVY AIR, AND XLVII-C OF Y240M822A0100 FOR NAVY SHIP)

40.5.28.7 TSR N Parameter (Block 33, Word 10). - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

BIT	DESIGNATION
0-15	TSR N PARAMETER FOR OWN TERMINAL AS USED IN INDEXED COORDINATED CONTENTION (ICC) ALGORITHM FOR THE CURRENT REALLOCATION PERIOD (SEE 3.2.9.2.9 OF Y240M798A0100 AND/OR Y240M822A0100)

40.5.29 TSR Basic Blocks Selected Number 1 (Other Terminals). (Block 34, Words 3-32) Format of Status Block 34 is identical to that of Status Block 32. - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

LOGIC 0 = Basic Block not selected for transmit by a terminal which chose prior to own terminal.
LOGIC 1 = Basic Block selected for transmit by a terminal which chose prior to own terminal.

NOTE: STATUS BLOCKS 34 AND 35 ARE NOT USED IF THE TERMINALS WITH RECEIVE COUNT LEVEL LESS THAN OWN TERMINAL'S RECEIVE COUNT LEVEL HAVE BEEN ALLOCATED ALL THE BASIC BLOCKS.

40.5.30 TSR Basic Blocks Selected Number 2 (Other Terminals). (Block 35, Words 3-4) Format of Status Block 35 is identical to that of Status Block 33, words 3 and 4. - NAVY SHIPBOARD AND NAVY AIRBORNE ONLY

LOGIC 0 = Basic Block not selected for transmit by a terminal which chose prior to own terminal.
LOGIC 1 = Basic Block selected for transmit by a terminal which chose prior to own terminal.

STATUS BLOCK 33